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Air Conditioning & REFRIGERATION

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NEWS

Dealers' Views Followed In '42 Line of Gibson

Both Refrigerator & Range Lines Reduced; Leader Model Eliminated

GRAND RAPIDS, Mich.—Gibson's 1942 refrigerator line, consisting of five models instead of last year's eight, was presented to more than 175 representatives of the company's national distributor organization at a two-day convention at the Pantlind hotel here last week.

The new Gibson line of electric ranges, also shown at this meeting, consists of three models, one short of last year's four.

This restriction of models is in accord with the results of a survey conducted among 3,000 dealers to determine the two most beneficial services that the manufacturer could render the retail trade, according to John L. Stephens, sales promotion manager. In addition to limitation of models, answers to the questionnaires suggested that distributors exercise greater selectivity in appointing dealers for the coming season, Mr. Stephens reported.

Prices of the new refrigerators range from a low of \$139.95 to a high of \$259.95.

The equivalent of last year's Model C-631 has been eliminated from the 1942 line, which starts with Model CU-632, the equivalent of the second model in this year's line. The other four models, with their suggested list prices, are: Model F-662, \$174.95; Model F-682, \$199.95; Model F-692, \$219.95; and Model SF-792, \$259.95.

These prices, Gibson officials state, are based on the premise that the low-priced leader model which has been featured throughout the industry for the past few years is not essential to this year's merchandising program, inasmuch as unit volume cannot be the prime objective under the government's curtailment program.

Stressed at the distributor meeting was the thought that, in view of existing product curtailment, sales of higher priced models should be

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Power Cut Delayed, Other OPM Curbs In South To Continue

WASHINGTON, D. C.—Following an all day meeting in Atlanta with representatives of the major public and private utility systems in the Southeast, the OPM Power Branch staff last week announced indefinite postponement of the pending 30% power curtailment of large commercial and industrial consumers in six southeastern states and definite assurance of relaxation, beginning Dec. 15 at the latest, of the blackout restrictions now in effect.

The following provisions of the OPM Power Limitation Order must however be continued in full force and effect:

1. Freezing of consumption at September levels of large commercial and industrial consumers in Georgia, Alabama, Tennessee, eastern Mississippi, southeast South Carolina, and northwest Florida.

2. Power pooling arrangements for maximum deliveries of power into the shortage area.

3. Strict compliance with blackout restrictions until Dec. 15 or such earlier date as may be announced later.

Precise arrangements for the re-

(Concluded on Page 12, Column 1)

Blow-by-Blow Account of EARDF Activities

On page 2 of this issue, the NEWS begins a "forum" to be devoted to comments and reports on the activities of EARDF organizations throughout the country, and to information on what dealers may be doing individually to advance the cause of the electrical appliance industry and its importance to the nation.

Reported this week are the programs of two recently organized EARDF groups, one covering northern Ohio and the other the state of Michigan. Other EARDF units, as well as individual distributor and dealer readers, are invited to submit reports on their activities for publication.

Dealers Advertise Terms To Prevent Slump In Buying

MINNEAPOLIS — To avert any sales slump due to misunderstanding of the recently imposed federal regulations on instalment buying, the Minneapolis Electric Appliance Dealers Association has taken large space in local newspapers to advise the public that "You Can Still Buy Electrical Appliances on Easy Terms."

"The Federal Reserve Board regulations on instalment buying now in effect is distinctly helpful to home budgets," the advertisements declare. "The proverbial sugar bowl on the pantry shelf needs but little filling before it will pay the down payment on any number of 'wife-savers' (household conveniences).

"For example: only 20% minimum down payment and 18 months to pay the balance is required for the purchase of mechanical refrigerators of up to 12 cubic feet capacity—or household washing machines, suction cleaners, cook stoves, ranges, etc.

"Easy, isn't it?"

"Yes, and you'll find some change left in the sugar bowl to buy a good big set of defense savings stamps, too."

Credit Rules To Stand Until Christmas

WASHINGTON, D. C.—Christmas shoppers who plan to buy their gifts on credit need not worry about further tightening of instalment selling regulations, for the Federal Reserve Board has announced that it will not change its credit rules before the holiday. Board officials admitted that a stiffening of regulations has been studied for several weeks.

Present regulations call for a 20% down payment and 18-month terms on major appliances. Furniture requires 10% down and 18 months. Automobile regulations are 33% down with 18-month terms.

D. P. Heath Killed By Hit-Run Driver

PHILADELPHIA — Lieut. Commander Delos P. Heath, U.S.N., well-known Detroit refrigeration engineer, died here Sunday night, Nov. 30, from injuries received Nov. 27 when he was struck by a hit-run driver. He was to be buried Dec. 3 in Arlington National Cemetery with the U. S. Navy conducting the services.

Well known as a design engineer

(Concluded on Page 11, Column 2)

Philco Stresses 7-Foot Models In Line Showing

Number of Models Cut, But Styling, Features Have Been Retained

PHILADELPHIA — Five models, one six and four sevens, comprise the 1942 refrigerator line which Philco Corp. is introducing this week in a series of eight sectional meetings.

Number of models is four less than that of the 1941 line, which included five sixes, two sevens, and two nines. Only one Conservador model, the RAH-7, is featured for 1942, compared with two last season. In general, the new line follows last year's in design and styling. Doors, however, on the four seven-foot models are fluted, cut-out metal letters are used on the nameplate, and color has been introduced in the interior.

All five models have a bottom vegetable bin. With the exception of the one Conservador model, the evaporator is located at top left. Porcelain interiors and Dulux exteriors are used throughout the line.

Leader model for 1942 is the SMR-6, with a rated storage capacity of 6.3 cu. ft. Full length evaporator door in this model is decorated with a blue design baked into porcelain. Large metal tray for defrosting or extra-cold storage is concealed. For vegetables a porcelain, glass-covered sliding crisper is provided.

Other features include a loose panel shelf, automatic interior dome light, ball-bearing door hinges, "feather-touch" plastic door latch finished in chrome, levelers for uneven floors, polished chrome hardware, and a one-piece steel cabinet insulated with mineral wool.

Philco's hermetically sealed "super power" compressor is used in all models. Shelf area of the SMR-6 model is 12.5 sq. ft. Ice capacity is 8 pounds with four trays.

Model RR-7, with a storage capacity of 7.1 cu. ft., features the streamlined cabinet design, including the fluted door. Other features are substantially the same as SMR-6. Vegetable bin, however, is divided into two sections, and the meat storage tray is not concealed. Shelf area of this unit totals 13.3 sq. ft. Four ice trays have a capacity of 8 lbs. of ice cubes.

Interior of model R-7 differs considerably from the first two models of the line. Exterior has the fluted door. Evaporator door on this unit is of porcelain trimmed in blue plastic. Sliding vegetable crisper drawer is full width, covered with glass, and there is also a glass covered meat storage tray.

(Concluded on Page 11, Column 2)

Omaha Surgeons See Demonstration Of 'Freezing' Anesthesia Technique

OMAHA, Neb.—For the first time, members of the medical profession in this part of the country witnessed a demonstration of "freezing" for amputation, a new operating technique which employs refrigeration as the sole anesthetic in amputation. Dr. Harry E. Mook, Chicago surgeon, who credits Dr. Frederick Allen of New York City with the development, made the demonstration at the annual meeting of the Omaha Mid-West Clinical society here.

Besides eliminating shock, the refrigeration method of anesthesia, plus the tourniquet, helps prevent loss of blood, and can be used to prevent post-operative pain as well as retard the growth of bacteria, Dr. Mook said.

Expect Repair Suppliers To Get Rating For Inventory

Distribute Repair Parts? Don't Miss Page 3

On page 3 of this issue of the NEWS is an article that is of prime importance to all distributors of refrigeration repair parts and supplies.

If you are operating a business of this nature, be sure to read the article on page 3, and check the listing at the conclusion of the article.

Price Check Is Asked On Small Appliances

WASHINGTON, D. C.—Requests to refrain from advancing prices of small domestic electrical appliances above the levels of Nov. 1, 1941, were sent last week to about 240 manufacturers, by Leon Henderson, OPA Administrator. A longer range price program for the industry is expected to be made public shortly, Mr. Henderson said.

Products classified as small electrical appliances for household use include: irons, toasters, roasters, waffle irons, coffee makers, hotplates and grills, heaters and heating pads, warmers and sterilizers, vibrators, dryers, mixers and juicers, clocks, fans, and shavers.

Advance Prices on 2 Lines Announced

NEW YORK CITY—New York zone prices on the 1942 lines of electric refrigerators announced last week by distributors for Stewart-Warner and Frigidaire showed a divergent trend, with Frigidaire prices practically unchanged from late 1941 figures, and Stewart-Warner prices up as much as \$25 in some models, according to a report published in a New York City newspaper.

Four advance models introduced by Frigidaire, the report said, were priced only slightly above last prevailing 1941 quotations, with the S7-42 listed at \$132.86; the M7-42 at \$145.91; the MP7-42 at \$166.34; and the D7-42 at \$161.07, in the New York zone.

Quotations on four 6-foot and three 8-foot Stewart-Warner 1942 models were announced by Colen-Gruhn Co., distributor, and were roughly from \$20 to \$25 higher than

(Concluded on Page 11, Column 3)

Col. Coneybear Discusses Present P-22 Order & Possible Extensions

DETROIT—The so-called "jobbers' rating order" which is "now in the mill at the OPM offices" will permit an inventory of repair and maintenance parts for refrigeration equipment used by retailers and homeowners, the inventory figure being based upon the amount of such parts which the jobber sold in a previous period, probably the previous quarter, declared Col. John Coneybear, administrator, repair and maintenance division, OPM, in speaking before a large group of businessmen here last week.

"This order should, in effect, act as a 'sales stimulator' to keep jobbers' stocks moving," pointed out Col. Coneybear. "The more stuff the jobber moves from his shelves under this order, the more he is going to get when it comes time to figure up what he should get."

In answer to a question as to "what was holding up this 'jobbers' order," Mr. Coneybear muttered: "I wish I knew."

The present amended Preference Rating Order P-22 "stops with the wholesaler," as far as defining the kind of business that can get repair parts to keep operating, stated Col. Coneybear. It cannot be used to build up an inventory of supplies for a jobber or dealer in repair parts.

In answer to a question by a representative of the automotive trade, Col. Coneybear stated that the present order did not apply to permit a re-building shop to get parts to rebuild cars, but that it probably would permit the purchase of repair parts for machinery used by the re-building shop.

"The order cannot be used to provide anything in the way of a complete or patched-up piece of equipment that can be sold to anyone else," is the way the OPM official explained it.

"What if a machine should break down to the point where it is ready for the scrap-heap, can the P-22 order be used to secure a new machine of the same size or capacity?" was one of the questions asked.

"It has been ruled," replied Col. Coneybear, "that you cannot use the order to replace any piece of equipment which is carried on a firm's books as capital equipment and depreciated as such."

Making a plea that men dealing in repair and maintenance work not regard "P-22" in the light of "How can I get around it," the speaker from OPM reminded those present of the possible penalty of 2 years in jail and \$10,000 fine that incurs to those who wilfully violate the law.

"One fine morning some of you are going to wake up and find an inspector from OPM on your doorstep," he declared.

One member of the group conferring with Col. Coneybear in the open discussion following the general OPM meeting in Detroit posed a hypothetical case that would have violated the letter of the order, but perhaps not the spirit of it.

"Well, go ahead, and I'll bring you cigarettes when you're in jail," came back Col. Coneybear, as his audience roared.

In answer to a question as to "what should I do if I am reasonably sure that my customer is wrongfully using the P-22 order," the OPM executive replied:

"If you are satisfied that the order is being mis-used, you have an obligation as a good citizen to return any order for materials placed under such circumstances. There is a direct legal responsibility only in that if you fail to do anything about it, you are condoning a felony."

(Concluded on Page 11, Column 3)

Appliance Retailers and Distributors Forum Activities

Complete Program of Action Outlined For Michigan Appliance Men

DETROIT—Michigan's representatives in the nation's capital soon will be hearing plenty regarding the importance and essentiality of refrigerators and other household electrical appliances to their people.

Armed with a complete program of action, appliance distributors throughout the state are preparing to line up their retailers under the newly organized Electrical Appliance Retailers and Distributors Forum of Michigan, to give these men a voice in influencing, if possible, the future course of events affecting the industry on which their livelihood depends.

Activities of distributors in Detroit and lower Michigan were launched at a meeting Nov. 28 in the Detroit-Leland hotel here. Distributors in northern Michigan soon will be invited to a meeting in Grand Rapids, at which the program will be inaugurated in that area. The organization will be state-wide, and will be directed from headquarters in Detroit.

Chairman of the Michigan Forum is S. C. Caswell of General Electric Supply Corp.; with L. F. Johnson of Maytag Central Co. as secretary-treasurer. Serving on the organization's Planning Committee, in addition to the officers, are: Frank Hackett, Good Housekeeping Shops; David Burke, Radio Distributing Co.; and Charles Strawn, Bliss-Strawn Distributing Co.

Distributors of both major and small appliances are brought together in the Michigan Forum. As the first step in their program, each distributor will school his dealer contact men in all phases of the activity. These contact men will then carry the program to their dealers, giving them a complete outline of what the Forum is seeking to accomplish, and why united action of some sort is necessary under present conditions.

Each dealer will be supplied with a number of cards outlining the aims of the EARDF movement, a list of the names and addresses of the U. S. congressmen in his district as well as of other congressmen representing the state, and a list of "reasons why" each of the major and small appliances in use today is important to the health and morale of America. These lists will be made available in sufficient quantity that dealers who wish to enlist the support of their customers may "arm"

these people with this same information.

In addition to furnishing the dealer with all this material, the dealer contact man will assist these dealers, as well as their employees, customers, and friends, in the composition of letters to congressmen. These letters will contain a simple, yet constructive story, appealing for assistance in preserving the dealer's present means of earning a livelihood, and pointing out the important contributions which electrical appliances make to health and welfare.

To provide an accurate picture of the state-wide EARDF activity, distributor representatives will be required to fill out a "Dealer Activity Report" for each retailer they contact. This report will show the number of letters and telegrams which the dealer (and his employees, customers, and friends) have sent to congressmen, and will enumerate any other activities in which the dealer has taken part, or suggestions which he may have as to how the Michigan program can be made more effective.

As the program develops, additional activities will be suggested to dealers by distributor field men, who in all cases will follow up on all their contacts to encourage fullest possible participation by retailers in the movement.

General Electric Supply Corp., Detroit, already has started the program among its own dealers.

Retail Salesmen Active In Toledo 'Forum'; Public Support Sought

TOLEDO—The Toledo Unit of the Electrical Appliance Retailers and Distributors Forum got off to a flying start at a meeting held Nov. 25 in the Secor hotel, when 85 dealers, retail salesmen, and distributors and their men voiced complete approval of a proposed program of action, and expressed determination to see it through.

In addition to distributors and dealers from metropolitan Toledo, the local EARDF will represent dealers from towns in northwestern Ohio and lower Michigan which are in the Toledo distributing area. These smaller towns will have their own EARDF units, but will be represented by a delegate to the Toledo Unit, whose job it will be to keep the movement alive in his own community.

Officers of the Toledo EARDF Unit are: president, V. J. McGranahan, McGranahan Distributing Co., Toledo; vice president, Benjamin Rubin, Tiedtke's, Toledo; secretary, Roy Chandler, Chandler Hardware Co., Sylvania; and treasurer, William Smith, J. W. Green Co., Toledo.

To complete the governing board of the organization, five additional men will be chosen by the officers to serve as directors of the EARDF unit. Names of these men will be announced later.

Annual dues were established as follows: distributors, \$25; dealers, \$10; and dealers' salesmen, \$1. Decision to include dealer salesmen in the organization is especially interesting, inasmuch as it was not part of the original plan. One of the salesmen attending the meeting, however, insisted that these men wanted to do their part, since it was their "fight" as much as that of distributors and dealers. Membership in the unit, it is expected, will be greatly augmented as a result of this move.

Three committees will be set up in the Toledo EARDF Unit: organization and membership, publicity, and consumer research. Purpose of the consumer research committee is to devise new methods to enlist consumer support of the program—whether this support be from organized groups, such as Women's Clubs, church organizations, or from individual users of electrical appliances.

As fast as this committee finds some method of enlisting the support of groups outside the appliance dealers, its recommendations will be put to a test, and if found successful will be recommended for use by the entire EARDF membership.

One such move to interest consumers in the EARDF movement already has been taken by H. G. Bogart, Toledo General Electric distributor and general chairman of the national EARDF organization. Mr. Bogart recently sent a letter to 100 refrigerator users, selected at random in the Toledo area, in an effort to ascertain just how highly the average user valued refrigeration service in the home. The letter follows:

"I am sure you have read a great

deal about the intention of the United States Government through its agency, OPM, to cut down drastically the manufacture of electric refrigerators during the present emergency. Those of us in this business believe all things made of metal should be cut back to assist the Defense Program, but we question seriously whether refrigerators should be practically eliminated during the emergency, because of some very disastrous results which could take place.

"It is easy for us to over-emphasize our own importance, because we are too close to the business, so I have elected to write a letter to 100 persons in Toledo to see whether or not I have placed the proper valuation on refrigeration service in the home.

"Food in general must be preserved through refrigeration from the time it is produced until it is consumed. Food bad in quality or deteriorated through lack of proper refrigeration, is both unhealthy and dangerous. What I should like to have from you is an expression in your own language, as to the importance and value which you, personally, place on proper refrigeration in your home.

"We believe if the men who decide these policies had a better understanding of the vital necessity of refrigeration, whether it applies to a warehouse, butcher shop, or the home, they might place this industry on a more favorable basis than apparently is now intended.

"Anything which you wish to contribute will be very gratefully accepted. Your name will not be used or publicized in any way."

Replies to the letter already received indicate that the average consumer is very much interested in this question, once it has been brought to his attention, Mr. Bogart reported.

One letter said: "All of us who profess to be true Americans are willing to do without a lot of things to assist the defense program, and are willing to help defend the Stars and Stripes, but it seems to me that there are a lot of things we could do without more easily than proper refrigeration. If the food that we have is not properly taken care of by proper refrigeration, it will be wasted, and will be a detriment to the general welfare of all citizens, including the sick and the babies, who above all, must have food that is properly taken care of by refrigeration."

Said another consumer: "Electric refrigeration is close in importance to a good cook stove in maintaining the health of our nation.

"If we must go back so far in refrigeration as to do away with the electric model, then why not go back to cooking with wood. It seems just as reasonable.

"If the government really wants to save gasoline (which I doubt) then how about the gasoline it would take for the extra trips to the marketing places for perishable foods?"

PARKER PROCESSES are "Pinch-Hitting" for Defense Materials in Many Industries



In the refrigeration, air conditioning, washing machine, electrical and many other industries, Parker Processes are aiding production executives in making successful substitution for strategic metals. Priorities are creating finishing problems in all industries, but Parker chemists are in many cases showing a satisfactory way around shortages of zinc, tin, cadmium and chromium. They are providing protective finishing systems that assure finish durability.

Parker Processes provide substantial protection, maintain fine appearance and give new sales appeal. With Parkerizing for protection from rust on mechanical parts and Bonderizing as a rust-inhibiting base for enamel, you can sell your merchandise with complete assurance that it will give satisfactory service.

PARKER RUST PROOF COMPANY
2197 E. Milwaukee Avenue • Detroit, Michigan



PARKERIZING

A finish and substantial protection from rust on bolts, screws and small mechanical parts.



BONDERIZING

A rust inhibiting paint base that bonds the finish to sheet metal surfaces.



PARCO LUBRIZING

A chemically produced coating for friction surfaces that retains oil and prevents metal to metal contact.

PARKER Processes CONQUER RUST

BONDERIZING • PARKERIZING • PARCO LUBRIZING

Dealer Activity Report

ELECTRICAL APPLIANCE RETAILERS AND
DISTRIBUTORS FORUM OF MICHIGAN

Dealer
Address
The above dealer has cooperated in the activities of EARDF in the following manner:
Letters sent to Congressmen
Telegrams sent to Congressmen
Other activities and remarks:

Salesman

Distributor

A Tentative List of 'Bona Fide' Refrigeration Supply Jobbers

Association Prepares List For Possible Use
By OPM, Asks For Suggested Corrections

CHICAGO—When, as, and if the so-called "jobber's order" is issued by the Office of Production Management, amending or extending the P-22 repair and maintenance order so that it will permit distributors of repair parts and supplies to get inventories for such supplies for any kind of refrigeration system (see story on page 1), it is likely that the OPM will seek a list of independent refrigeration parts and supplies jobbers.

The committee of the National Refrigeration Supply Jobbers Association, headed by C. E. Borden of the A. E. Borden Co., Boston, N.R.S.J.A. president, which has been in close touch with OPM regarding this promised order, has asked its association officers to prepare a list that will comprise, to the best of its knowledge, all the "bona fide" independent refrigeration parts and supplies distributing firms in the country. The list includes non-members of the association as well as members, of course.

In turn, the N.R.S.J.A. offices have asked AIR CONDITIONING & REFRIGERATION NEWS to publish the list it has made up, and to point out that if there are any firms not included in this list who feel that they operate in such a manner as to be termed "refrigeration supply jobbers," such firms submit to the NEWS a statement as to the nature of their business, the manufacturers from whom they buy on a jobber basis, and furnishing their classified directory listing.

AIR CONDITIONING & REFRIGERATION NEWS will pass this information along to the N.R.S.J.A. offices for their consideration in making additions to the list.

The N.R.S.J.A. contends that any firm, or subdivision thereof, that sells or installs equipment direct to consumers cannot be included in this list even though they may buy one or two lines on a jobbing basis. The association office also points out that if there are names on the below published list that are not what some readers consider to be "bona fide" jobbers, comments from NEWS readers concerning these firms will be appreciated.

AIR CONDITIONING & REFRIGERATION NEWS is in no way responsible for or connected with the compilation of the following list, but is glad to cooperate with any industry groups and the OPM to expedite any matter in conjunction with the defense program and the priority systems. Correspondence about the listings should be addressed to AIR CONDITIONING & REFRIGERATION NEWS, 5229 Cass Ave., Detroit, Mich.—Attention, Editor.

ALABAMA
Birmingham
Auto Service Co.
Refrigeration Supplies Distributor
Montgomery
Teague Hardware Co.

ARIZONA
Phoenix
J. Carl White Co.

ARKANSAS
Little Rock
Refrigeration Supply Co.

CALIFORNIA
Fresno
Arbell Refrigeration Supplies
Los Angeles
Authorized Supply Corp.
Refrigeration Service, Inc.
Refrigeration Supplies Distributors
Sacramento
Associated Refrigeration & Equipment Co.
San Diego
Allied Refrigeration
San Francisco
Wyatt R. Brown
California Refrigerator Co.
Hinshaw Supply Co.
Pacific Metals Co., Ltd.
Refrigerating & Power Specialties Co.

THIS LISTING IS CONTINUED
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COLORADO
Denver
McCombs Refrigeration Supply Co.
CONNECTICUT
Bridgeport
Parsons Brothers
Hartford
Marsden & Wasserman, Inc.
New Haven
Resco, Inc.
DISTRICT OF COLUMBIA
Washington
Refrigeration Supply Co.

United States Electric Co., Inc.

INDIANA

Gary
Engineering Specialty Co.
Indianapolis
Central Supply Co.
Duncan Supply Co.
F. H. Langsenkamp Co.

IOWA

Davenport
Republic Electric Co.
Des Moines
Iowa Radio Corp.
Sioux City
Dennis Refrigeration Supply
National Refrigeration Parts
Waterloo
Winterbottom Supply Co.

KANSAS

Wichita
Howard Supply Co.

KENTUCKY

Lexington
United Service Co.
Louisville
George Dehler, Jr. & Co., Inc.
Louisville Mill Supply Co., Inc.
S. W. H. Supply Co., Inc.

LOUISIANA

Monroe
Motor Supply Co., Inc.
New Orleans
Enochs Sales Co.
MARYLAND
Baltimore
Baltimore Refrigeration Supply Co.

Parks & Hull Appliance Corp.

MASSACHUSETTS

Boston
A. E. Borden Co.
Springfield
C. F. Payson Co.
Worcester
Standard Supply, Inc.

MICHIGAN

Detroit
J. M. Oberc, Inc.
Riopelle Supply Co.
Young Supply Co.
Flint
Lifsey Distributing Co.
Grand Rapids
B. F. Harris & Son
Refrigeration Supply Co.
Saginaw
J. George Fischer & Sons, Inc.

MINNESOTA

Minneapolis
Refrigeration & Industrial Supply Co., Inc.
Vincent Brass & Copper Co.
St. Paul
Thermal Service Co., Inc.

MISSISSIPPI

Jackson
Plumbing Wholesale Co.

MISSOURI

Kansas City
Forslund Pump & Machinery Co.
Refrigeration Equipment Co.
St. Joseph
Bristol Supply Co.
St. Louis
Authorized Refrigeration Parts Co.

Brass & Copper Sales Co.
R. H. Sprangler & Co.
R. E. Thompson Co.

NEBRASKA

Lincoln
Ruegg Refrigeration Supply
Wickham Supply Co.
Omaha
Interstate Machinery & Supply Co.
H. C. Noll Co.

NEW JERSEY

Atlantic City
Atlantic City Auto Supply Co., Inc.
LeBeck Sales Co.
Newark
T. W. Binder Co.
Wallwork Brothers, Inc.
Paterson
White & Shauger, Inc.
Ridgefield
Melchior, Armstrong, Dessau Co. of
Delaware, Inc.

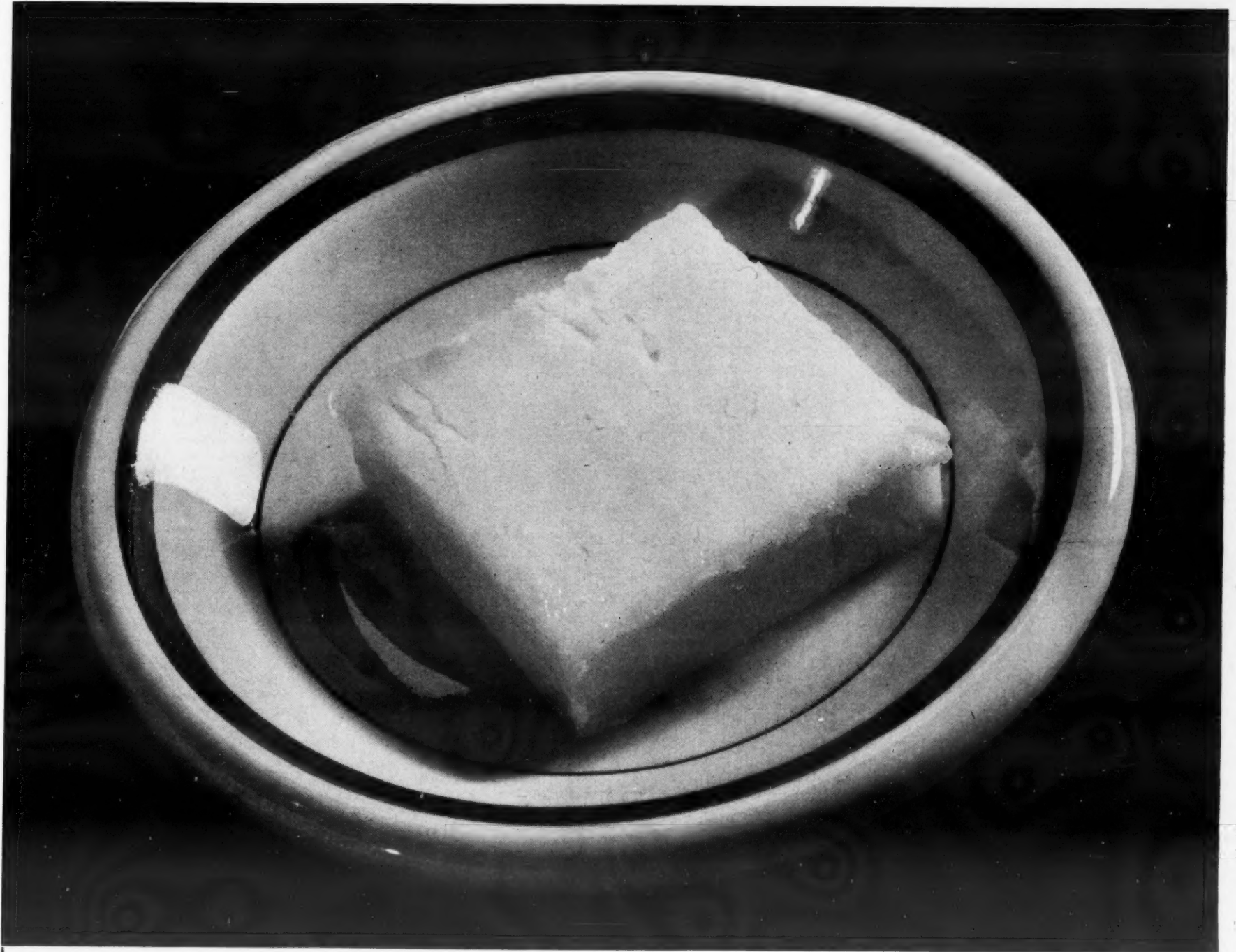
TRENTON

Radio Hospital

NEW YORK

Brooklyn
Capson Co.
Coleman Electric & Supply Co.
Excel Refrigeration Supplies, Inc.
Buffalo
Beals, McCarthy & Rogers
W. A. Case Sons Mfg. Co.
Root, Neal & Co.
Elmira
Law & Co.

CONTINUED ON PAGE 12



Butter

The morale of the nation runs parallel to our supply of butter. With an annual production of 1,800,000,000 pounds we ought to have plenty of morale, especially when we know how perfectly this golden, vital food is preserved and protected by the Refrigeration Industry. Food defense is national defense and Mills now demonstrates its own morale by adding new facilities to meet the increased demand for our Refrigeration Products.

MILLS NOVELTY COMPANY CHICAGO

In '42 you have a job to do!

—and you can do it better if you attend the **FOURTH ALL-INDUSTRY REFRIGERATION AND AIR CONDITIONING EXHIBITION**—January 12 to 15, 1942, HOTEL STEVENS, CHICAGO

General Motors Dealers May Buy Parts From 'Outside Sources,' FTC Rules

WASHINGTON, D. C.—General Motors Corp. and General Motors Sales Corp., Detroit, have been ordered by the Federal Trade Commission to discontinue "coercive and monopolistic practices" in their relations with General Motors dealers in violation of the Federal Trade Commission and Clayton Acts.

General Motors Sales Corp., the FTC charges, coerced and compelled dealers to purchase parts and accessories solely from it and prohibited purchases from outside sources, except in cases of emergency when "genuine" General Motors parts or accessories were not available in the respondents' warehouse.

According to findings, the entire plan was so designed as to prevent a dealer from making purchases from jobbers or other manufacturers, and to eliminate all parts and accessories other than those sold and distributed by General Motors Sales Corp.

In cases where parts and accessories other than those supplied by the respondents have been found on a dealer's premises, threats have been made that unless the practice on the part of the dealer is discontinued and only General Motors parts are carried, the dealer's contract would be cancelled, the FTC asserts. The respondent sales corporation, in many instances, delivered auto-

mobiles equipped with various accessories which were not ordered by the dealer, and shipped accessories with or without cars, without prior order therefore, it is charged.

Dealers also were required to project or make estimates of future needs in parts and accessories, which in many instances were treated as orders and shipped on that basis, it is charged.

'CREATED MONOPOLY'

Respondents' practice of selling parts on the condition, agreement, or understanding that the purchaser shall not sell or use parts of a competitor has had the effect of substantially lessening competition and a tendency to create a monopoly in replacement parts used on General Motors cars, the FTC asserts. By means of the provision in the contract that General Motors dealers will not sell or offer or use parts not manufactured by or authorized by the respondent sales corporation, the findings continue, practically all or approximately 14,000 General Motors dealers have been removed as customers and prospective customers of independent manufacturers and jobbers, and there have likewise been removed as customers of such manufacturers and jobbers all associate dealers and selected independent garages who have agreed to purchase only parts supplied by General Motors dealers.

SECTIONS OF ORDER

The FTC order directs General Motors Corp. and General Motors Sales Corp., in connection with the sale and distribution of automobile accessories, supplies, and similar products, to cease and desist from (1) requiring dealers, by means of intimidation or coercion, to purchase or deal in accessories or supplies sold and distributed by the respondents or by any one designated by them; (2) cancelling, or directly or by implication threatening the cancellation of, any franchise or agreement with dealers, because of their failure or refusal to purchase or deal in the respondents' accessories or supplies; (3) cancelling, or directly or by implication threatening the cancellation of, any franchise or

agreement with any dealer, for purchasing or dealing in accessories or supplies not obtained from the respondents; (4) shipping accessories or supplies without prior orders therefore, or cancelling, or directly or by implication threatening the cancellation of, any franchise or agreement with a dealer because of a failure or refusal to accept accessories or supplies shipped without prior order; and (5) refusing, or threatening to refuse, to deliver automobiles to dealers because of a failure or refusal to purchase or deal in the respondents' accessories or supplies.

EXCLUSIVE DEALING

The order also directs the respondents to cease and desist from violating the exclusive dealing section of the Clayton Act by entering into, enforcing, or continuing in operation or effect, any franchise or agreement for the sale of automobiles or any contract for the sale of, or selling, automobile parts on the condition, agreement, or understanding that the purchaser shall not use or sell automobile parts other than those acquired from the respondents, unless such condition, agreement, or understanding be limited to automobile parts necessary to the mechanical operation of an automobile, and which are not available, in like quality and design, from other sources of supply.

Gimbel's Puts Appliance Dept. on New Floor

NEW YORK CITY—In the first move in five years, the major appliance department of Gimbel's, department store here, has been transplanted from the sixth floor to a new larger location on the eighth floor. Included in the new setup are private rooms for credit discussion, "model laundry" for washing machines, and segregated refrigerator and range departments. Men will continue to "inter-sell" on all appliances.

Portland, Ore. Dealer Signs 5-Year Lease

PORTLAND, Ore.—Marks Household Appliance Co., 8125 Southeast Foster Road, has signed a five-year lease for the north half of the building now under construction at 5420 Southeast 82nd Ave., according to Darrell Marks. The company will add a line of household furniture and mattresses to their present line of electrical appliances.

Toledo Furniture Mart Opens New Store

TOLEDO—Toledo Furniture Mart has established a new store at Broadway and South Aves. with a full-size appliance department handling the Norge line. Jack Lippman is appliance buyer. The department includes a service shop, and individual sections for radios, refrigerators, ranges, and washing machines and laundry equipment.

Milwaukee Firm Drops Downtown Store

MILWAUKEE—The Atlas Good Housekeeping Shops is discontinuing its downtown store at 725 N. Plankinton Ave., and will concentrate its future business in its stores at Third and Clarke Sts., 35th St. and North Ave., and Eighth and Mitchell Sts.

Fort Wayne Dealer Buys Old Bank Building

FORT WAYNE, Ind.—Protective Electric Co. here has purchased the old First National Bank Bldg., a three-story structure, and will establish a large display room on the first floor. Second floor will be used for offices.

Kansas City Dealers To Continue Fight Against 'Trade Diversion' Despite Veto

KANSAS CITY, Mo.—Appliance dealers led by G. W. "Jerry" Weston, secretary-manager of the Electric Association of Kansas City, will continue their drive against "trade diversion"—business firms' buying at discount for their employees—despite Gov. Donnell's veto of a bill prohibiting such practices.

The bill, modeled after the Wisconsin law covering the subject, had passed the state senate by a vote of 26 to 1, and the house by an 87 to 22 vote.

Gov. Donnell in vetoing the bill said he felt that it conflicted with state statutes.

Mr. Weston said that an effort would be made now to control the evil by working through the Chamber of Commerce; in another two years, the various groups backing the bill may try to get it through the legislature again.

POINTS FOR THE BILL

The brief for the bill made the following points:

"Last year 38 Kansas City wholesalers in various lines paid \$80,436.27 sales tax. This represents a retail sales volume of \$4,021,812.

"Now, if that retail sales volume had been handled by retailers, its volume would have been at least \$6,000,000, with a sales tax of \$120,000. Therefore, the state lost approximately \$40,000 in sales tax on the retail sales made by those 38 wholesalers . . . on a statewide basis, this means that the state is probably losing at least \$300,000 in sales tax annually, and the retailers huge sums in sales that should be theirs.

"Wholesalers as well as retailers are for the bill, because it would give them a way out of a practice they consider a sort of necessary evil. At present, they have to accede to the requests of large firms of all kinds whose employees want to buy 'at wholesale.' In yielding to these requests, wholesalers jeopardize the stability of their own dealers, who complain vigorously of the practice. Small town dealers are hurt, too, because many of their customers buy 'at wholesale' in the larger cities.

"Retailers perform a number of important and indispensable functions for consumers. The processes of production and distribution operate

most effectively and economically when merchandise moves in an orderly way to consumers through regularly established distribution channels. When these orderly processes are disrupted in any manner, the endeavors of producers and distributors to improve their services and to lower their costs are nullified, and savings which would accrue to consumers do not materialize."

Oct. Refrigerator Sales Drop In Houston

HOUSTON, Tex.—Total of 703 household refrigerators were sold during October in the territory of Houston Lighting & Power Co., compared with 952 units sold during the same month of 1940, according to reports compiled by the utility. Refrigerator sales for the first 10 months of the year totaled 17,903 units.

Eight electric range sales and no electric water heater sales were reported for October this year; last year three range sales and 10 water heater sales were chalked up.

A more complete tabulation of major appliance sales in the Houston area, which includes Galveston, Goose Creek, Rosenberg, Wharton, Freeport, Humble, and La Porte, both for October of this year and last and for the first 10 months of 1941, follows:

Appliance	Oct., 1941	Oct., 1940	10 Mos. 1941
Refrigerators ..	703	952	17,903
Ranges	8	3	73
Water Heaters ..	0	10	0
Radios	2,523	3,386	24,537
Washers	632	861	9,162
Ironers	73	42	496
Vacuum Cleaners	411	302	4,144
Air Conditioning Units	3	0	306
Air Conditioning Systems	0	0	29
Milk Coolers ..	0	1	42

Frigidaire Names Hickman Full-Line Dealer

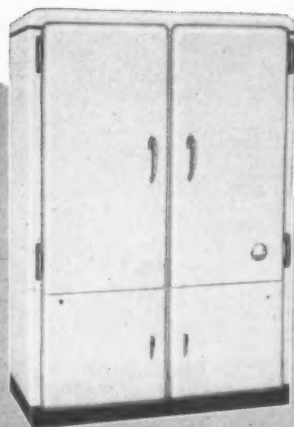
WARRENTON, Va. — Hickman Chevrolet Sales has been appointed full-line Frigidaire dealer here.

FROM
1/4 to 25 TONS
OF REFRIGERATION

Brunner Refrigerating and Air Conditioning equipment comprises air and water cooled condensing units for practically all types of commercial applications up to and including 25 tons of refrigeration. Catalog promptly on request. Brunner Manufacturing Co., Utica, N. Y., U. S. A.

BRUNNER

FOR YEARS THE SYMBOL OF QUALITY



Model 120 (above) has 12 cu. ft. capacity—the newest member of the "Midwest 'Reach-in'" family.

Model 700 (right) another new model has 71.5 cu. ft. capacity. In between is a full range of sizes and equipment. Write for full details now.

★★

Midwest

MFG. COMPANY
Galesburg, Ill., U.S.A.

Export Division, 176 W. Adams St., Chicago
New York Office, 1775 Broadway

12 TO 71 CU. FT.

MOST COMPLETE 'REACH-IN' LINE ON THE MARKET!

Here's the widest selection of sizes and styles the industry affords—a model for every need. Distinguished by superb styling, fine construction and outstanding value.



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Gilmer BELTS

Gilmer...the oldest firm of rubber-fabric belt specialists... has been serving industry since 1903.

The Gilmer plant is working day and night, making belts for national defense industries and for others just as essential... the business of preserving fresh foods, for instance. Makers and sellers of refrigeration and air conditioning equipment look to Gilmer for reliable drives on new and installed machines.

Gilmer jobbers in all parts of the country carry full stocks of V-belts. Our assortment of V-moulds is the largest in the world.

Gilmer's catalog, "America's Belt Bible," lists V-belts for 7800 models of refrigerators, besides air conditioners, pumps, oil burners, stokers and other appliances. Write for a free copy.

Visit our Booth No. 216 at the Fourth All-Industry Exhibition in Chicago, Jan. 12-15.

L. H. GILMER COMPANY
TACONY, PHILADELPHIA, PA.

Servicing May Keep Dealers Solvent For 'The Duration,' Niagara Group Suggests Charge Account Shifted To Instalments Needs No Down Payments

BUFFALO — Increased emphasis on servicing and repairs as a means of keeping electrical appliance dealers solvent during the national emergency was one of three suggestions considered by the appliance committee of the Electric Association of the Niagara Frontier, which met here to consider the problem.

Other suggestions included rental of refrigerators and other appliances, and addition of new product lines such as kitchen cabinets, linoleum and other floor covering, mattresses, furniture, stokers, oil burners, blowers, thermostats, attic ventilating, air conditioning, and residential insulation. It was agreed that most dealers will need some help in meeting emergency conditions.

It was suggested that this committee cooperate with three other merchandising committees of the Electric Association in conducting a Merchandising Clinic, starting at about 2:30 in the afternoon and continuing into the evening, with an interlude for cocktails and dinner. The program would consist of speakers, each one to be followed by an open forum discussion period.

Some committee members suggested that the association should attempt to keep dealer members informed of the various interpretations of the new Federal Reserve Board rulings on time payment sales. The association secretary suggested that trade paper discussions on this subject be sent to dealers, permitting them to decide what course to follow themselves.

The secretary also reported that a preliminary investigation on the advisability of conducting a "Bride's Cooling School" indicated that at least 70 could be counted upon to attend such a school, all being brides of one or two months and all residents of Buffalo.

Discussion was held on the "Sweep-stake" promotion which has been conducted regularly by the association for the past five years. Committee members were agreed such a

promotion should be continued this year because most felt there would be no shortage of appliances for the Christmas season. It also was agreed that the program serves to fix the names of association members more firmly in the minds of the public.

The suggestion was made that this year the method of awarding prizes be revised somewhat to include a special bonus to those persons who, since receiving the coupon, have purchased an item which they later win.

It was suggested that if a person buys a roaster after receiving a sweepstake coupon with her electric light bill and then should win a roaster, she should be given twice the cash value of the roaster she bought. The committee felt this would be of great value in influencing buyers to purchase the appliances on the prize list, in the hope of getting the double-value bonus.

WASHINGTON, D. C.—Sales made on an open charge account and later shifted to an instalment selling basis do not require a down payment and may have a maturity of 18 months, according to a ruling on Regulation W issued recently by the Federal Reserve Board.

In clarifying the regulation, the board ruled as follows:

Presuming "a registrant sells a listed article under a bona fide agreement that the purchase price will be paid in a single payment 60 days after date of purchase. By reason of a change in circumstances and not in pursuance of any previous agreement or arrangement, at about the time the payment is to be made the purchaser asks that the purchase be changed to an instalment basis. Is it necessary to get a down payment? From what date must the maximum maturity be calculated?"

"Since the sale was made under a bona fide agreement and there were no evasive side agreements between the parties, it is not necessary under the present terms of the regulation to get a down payment, and the maximum maturity is 18 months from the date on which the credit is changed to an instalment basis."

Bankers Oppose Further Credit Rule Tightening

COLUMBUS, Ohio—Any further tightening by the Federal Reserve Board at this time of its consumer credit regulations is opposed by the American Bankers Association, according to Walter B. French, deputy manager of the association, who told an Ohio bank-sponsored credit conference that consumer credit loans by banks for financing instalments on durable goods had dropped as much as 25%.

Many people believe that the Federal Reserve Board's Regulation W actually eliminates instalment credit, Mr. French said. Others

think it unpatriotic to ask for credit. The regulations, however, permit the credit needs of the average consumer to be well taken care of, he pointed out.

"Instalment lending is now a definite part of our economy," said Mr. French, "and hundreds of thousands of consumers have become accustomed to using some form of consumer credit periodically to supply their needs in goods and service. Too great a contraction at any time would operate against those of small income. The regulations issued thus far by the Federal Reserve Board appear to be fair and should result in no undue hardship to either borrowers or lenders, although they do represent definite curtailment."

Durable goods are the most important factor in the defense program, he said, and the most effective way of saving needed material is to limit production, which is already being done. The goods that are offered to consumers, he concluded, should be made available on a payment basis that is within the means of the greatest number of people, not only those in the high income brackets.

Farmer Income Shoots Up, Big Market For Equipment Shown

WASHINGTON, D. C.—Although rural electrification in this country has made striking progress in recent years, the number of farms using electrified agricultural and home equipment remains relatively low, reports an article in the forthcoming issue of "Domestic Commerce Weekly," Department of Commerce publication.

Farm income this year will reach about \$10,800,000, an increase of 13% over 1940 and only slightly under the 1929 record, but the increased demand for appliances and equipment will not be met fully because of shortages caused by defense requirements. As a result, a considerable backlog is expected to be built up for future exploitation.

At present it is estimated that more than 2,000,000 farms, about 35% of the country's total, have access to electric current. In Massachusetts, Rhode Island, Connecticut, New Jersey, and California, five out of every six farms now have electric lighting.

A recent survey of farms served by REA systems in 33 states showed that 41.3% had electric refrigerators, 55% washing machines, 89.7% radios, 85.3% electric irons, and 21% vacuum cleaners. However, only 1.1% had electric milk coolers, 16.5% utility farm motors, 18.4% electric water pumps, and 8.2% cream separators. Results of the survey indicate the extent of the potential market for both home and farm equipment.

During the five-year period 1935-1940, the sale of milking machines has shown a four-fold increase, while that of domestic water systems, tank heater, and electric brooders has tripled.

Despite this increase in sales, however, the ratio of saturation remains low. This is true in the case of such farm equipment items as milk coolers, utility motors, cream separators, power pumps, incubators, corn shellers, electrified farm shops, and other products which contribute to greater farm productivity and income.

JUNIOR'S GOT SHRINKAGE TROUBLE! But not his Dad—his locker plants have plate systems using "Freon" refrigerants. With this system, he gets uniform temperatures at the desired level in meat curing, quick freezing and holding rooms. He avoids the need for excessive low temperatures where the cooling surface is inadequate . . . keeping to a minimum the formation of heavy deposits of frost, dehumidification of air, and the dehydration of meat and other foodstuffs.

With the direct expansion system using "Freon," your customers can often save as much as 25% in power costs by cutting out the extra step of cooling brine, found where a secondary system is used. Their capital investment is lower, too, because they don't have to buy brine coolers, pipes and pumps.

The fastest economical freezing known can be obtained with the direct expansion system using "Freon." This system elimi-

nates brine coils, uses plates instead. Faster sharp-freezing results, because food resting on pipes gets only a fraction of the cooling contact obtained by food in direct contact with the plate. This permits the use of a smaller sharp-freezing room, allowing more locker space to produce income.

Your customers can literally sweep frost away when they use the direct expansion system. Frost on plates is easily removed with a broom. This saves time in defrosting, and ends losses in efficiency caused by heavy frosting of pipes. And "Freon" refrigerants are completely harmless to food. No danger of heavy losses which might result from refrigerant leaks, causing spoiled meats, vegetables, fruits.

These are some of the reasons so many locker owners insist on compressors using "Freon." The more you investigate, the more you'll be convinced there's only one choice for locker plant use—"Freon" refrigerants.

"No, son, I said my systems using 'Freon' cut down shrinkage in my plants!"

4 big advantages

"Freon" brings to locker plants

1. Lower Capital Investment
2. Lower Power Cost
3. Easier Defrosting
4. Less Shrinkage



FREON

REG. U. S. PAT. OFF.

safe refrigerants

*"Freon" is Kinetic's registered trade mark for its fluorine refrigerants

KINETIC CHEMICALS, INC., TENTH & MARKET STREETS, WILMINGTON, DELAWARE

Air Conditioning & REFRIGERATION NEWS

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F. M. COCKRELL, Founder

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Refrigeration Is Essential To America's Health And Efficiency

Big Stores vs. Specialists

ONE Earl Lifshy, writing in a department store tabloid recently, perorates on the thesis that during the coming curtailment period department stores are likely to handle the bulk of appliance sales.

Roughly, his theory is that if only a limited volume of refrigerators and other appliances are available, department stores can move them at a minimum sales cost to the manufacturer, and make it unnecessary for the manufacturer to worry about maintaining an elaborate distributor-dealer set-up.

That ain't the way we heard it, though.

The way we heard it, one sales manager said to t'other sales manager:

"Man oh man, here's where I get even with those chiseling sons-of-guns who've been in my hair all these years with their continual demands for specials and extra discounts!"

SOME DEPARTMENT STORES WILL GET PREFERENCE

Neither attitude will prevail, of course. Even though department stores as a class give most distributors and manufacturers an acute pain in the throboid, there are many high class department stores with appliance managers who take the *specialty point-of-view*, and who will undoubtedly be given preferential treatment.

As a matter of fact, however, some manufacturers are not inclined to believe that the average department store will be interested in selling refrigerators when curtailments really begin to hurt. They certainly aren't going to get the long discounts they have been enjoying, there will be no "spe-

cials," and of course their volume will necessarily be reduced by one half or more.

If the figures on department store appliance operations developed annually by the National Retail Dry Goods Association are true, and in angling for discounts many department stores seem to have implicit faith in them, the refrigerator and range departments are operated at a loss.

They are tolerated by big store managements, it is said, only because of the dollar volume they bring it. With this volume cut in half, at least, and with discounts lowered, many department store bigwigs may decide that they no longer can afford to shelter a chronically losing proposition.

'BIG STORES' WILL GET ALONG IN THE EMERGENCY

Aside from grim memories of the chiselling tactics of so many of the "big store" buyers, national sales managers have another reason for not being partial to the department stores and furniture stores during the Cur-tailment Era. It is this:

The "big stores" will get along all right in this emergency. Their "soft lines" will be booming, and so will many of their other departments. They will be there after the war if-as-and-when the manufacturers want them again.

But specialty dealers, the rock foundation of the business, are fighting for their lives. They depend on appliance selling for their livelihood. Without them they will perish, or drift into entirely different occupations.

MANUFACTURERS WILL HELP THEIR SPECIALTY DEALERS

The industry can't afford to lose its specialty dealers, and so most sales managers with whom we've talked in recent weeks declare that when allocations of appliances really get to be a mean problem, preferential attention should be given to the good specialty dealer who needs the products in order to stay in business.

Unless many department stores suddenly discover that they can sell refrigerators on a considerably smaller margin than they have previously thought possible, and adjust their operations to a much smaller volume, very few merchandising experts in the industry expect to see them remain as a factor in the business during the war.

LETTERS

RATING FOR HOUSEHOLD REPAIRS STILL AWAITED

Coghlin's, Inc.

244 Main St., Worcester, Mass.

Editor:

We would appreciate your comments on a problem which we have and which probably has been experienced by other refrigeration organizations.

We want to know how we can obtain parts for service performed for the average household under the new P-22, A-10 rating.

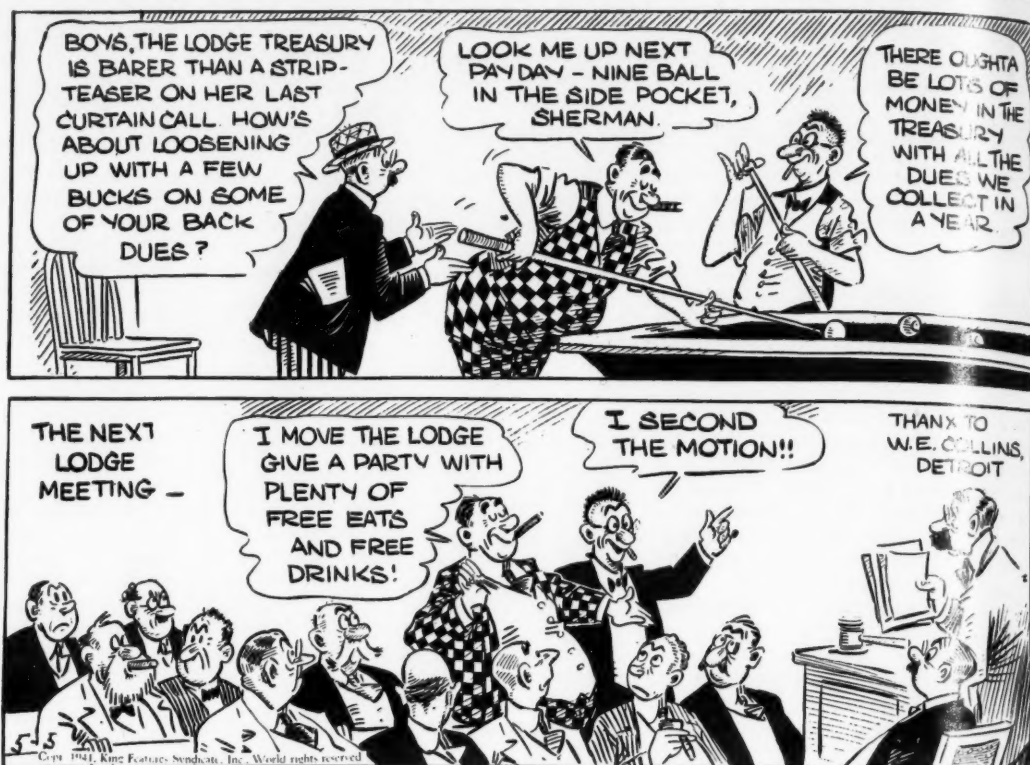
If we certify to our supplier that the material that we are ordering for our consumer-customer is for a duly rated order for repairs or emergency inventory we cannot substantially support such a statement with the proper certificates.

J. D. DOYLE

Answer: The fact is that although such an order covering maintenance and repairs on this type of equipment has been promised for some time, no such order has actually been issued as yet.

At present the A-10 rating to which you refer applies only to such large users as refrigerated warehouses and storage plants,

They'll Do It Every Time By Jimmy Hatlo



and to systems in hospitals and other similar institutions. Commercial refrigeration equipment such as is used in retail food stores has not yet received a preference rating, but it is expected that the order covering this equipment will also extend to household equipment now in service, although even this is not assured.

When, as, and if such an order is issued, you may be sure that all details as to certification, etc., will be covered completely in AIR CONDITIONING & REFRIGERATION NEWS.

CREDIT RULES APPLY ONLY TO U. S. SALES

Carlos R. Rossi
Calle Dr. José C. Barbosa No. 7
San Juan, Puerto Rico

Editor:

Will you please give us by return air mail the name of the department in Washington which we should address in order to secure a license for the sale of refrigeration, etc. on terms.

If there is any special blank or form in order to get this license, will you please send us a copy of same?

Thanking you in advance for your co-operation on this matter, and awaiting your advice by return air mail.

CARLOS R. ROSSI

Answer: The Federal Reserve Bank office here states that according to Section 9, Subsection (i) of Regulation W nothing in the regulation applies to sales made outside the continental United States.

It would not, therefore, be necessary for you to obtain a license to continue selling on instalments provided, of course, that none of your sales were made to customers inside the continental United States itself.

CONGRATULATIONS ON THE 'ORGANIZED WALLOP'

Minneapolis-Honeywell Regulator Co.
221 Fourth Ave., New York, N. Y.

Editor:

May I congratulate you on the organized wallop you are developing in behalf of the refrigeration industry. This movement has been stimulated by, and now revolves around, your good periodical and my hat is off to you for accepting the responsibilities so magnificently. Please continue with the same vigor and vitality.

If my feelings are typical, the personnel of the whole industry is with you 100% and ready to give you whatever support is required. I pledge herewith to the fullest extent whatever assistance I can offer as my small contribution.

If you continue with the same quality of leadership evidenced to date, we should win our battle for just recognition as an essential industry.

GORDON H. GILDERSLEEVE,
Eastern Manager, Refrigeration Div.

PUBLIC GOODWILL MUST NOT BE NEGLECTED

Refrigeration Service Engineers Society
211 Gould St.
Beaver Dam, Wis.

Editor:

As a member of the Temporary Educational Committee, I wish to thank you for your hospitality shown me while attending the meeting at your office on Oct. 14. I was glad to have a part in this very important

matter which we are trying to preserve for now and the future.

I would like to add one more thing to this program. I think we should not lose the sight of one thing which plays such an important part in the future of our business when this present crisis will be over. That is, PUBLIC RELATIONS, or GOODWILL, which I think is so necessary in any business, if we wish it to grow and continue into the future.

I was one of your first subscribers to your paper. Then due to differences arising in regards to attitude I discontinued my subscription. It appears to me now that this has changed. So I wish to subscribe to the REFRIGERATION NEWS again. If it is possible I would appreciate it if you would start my subscription with the back issues when the Town Meeting was started. I think that it was sometime in September. I would like to have them for references.

C. BUSCHKOFF,
First Vice President

HOW SPANISH FIRM 'CARRIES ON'

Anonima Rifa Anglada
Paseo de San Juan, 19
Barcelona, Spain

Editor:

Although, for the time being, we cannot import goods from the United States, it is of the greatest interest to me not to lose contact with the American markets and this is the reason we are asking you for the favor of sending us your Directory. We are continuing to subscribe to your interesting News.

We are at present trying to keep up business by selling home manufactured machines and using certain foreign accessories (American, English, and Swiss), such as sylphons, thermostatic valves, and pressure-stats. We do not get the sales volume we had in the past. However, we find enough business to keep up our sales organization.

There are several national makes in existence, with satisfactory yield results. Even domestic cupboards are manufactured.

I hope that I shall have the pleasure of seeing you at some future date and can remind you of your stay in Barcelona. We shall see if we can go to the bullfight.

LUIS M. RIFA

'WE SENT YOU SOME INCORRECT INFORMATION'

Foot Bros. Gear & Machine Corp.
5301 S. Western Blvd., Chicago, Ill.

Editor:

Is our face red! We refer you to a release sent to you concerning our Wallace F. Ardussi, who was recently placed in charge of research and product development for our company. Quite frankly, we are behind the "eight ball," for we have found that we sent you some incorrect information.

Paragraph three of our release read as follows: "He enters the Foot Bros. organization with a background of 10 years engineering experience with Chrysler Corp. where he progressed through the positions of research and development engineer, manufacturing and production research engineer, assistant to the president of Chrysler Corp.; and sales manager of the Airtemp division of Chrysler Corp."

The last two lines of our notice should have read: assistant to the president of the Airtemp division of Chrysler Corp.; and assistant sales manager of the Airtemp division of Chrysler Corp.

F. A. EMMONS, JR.,
Advertising Department

Are Your 'Clo' & 'Met' Ratings Correct For Weather Conditions?

New Terms Aid Study of Effects of Clothing

NEW HAVEN, Conn.—"Clo and met" may sound like the names of a radio comedy team, but actually they're technical terms coined by three American scientists to serve as a "yardstick" telling how much clothing a person will need to adjust to cold blasts or heat waves.

The "yardstick" is expected to have practical implications in showing engineers, physiologists, and doctors how rooms should be heated and how people should dress for a variety of weather conditions. It is a systematic standard of describing the necessary heat insulation for the body which protects it from the outside world.

Results of this cooperative research were announced by Dr. A. Pharo Gage, Yale University biophysicist; Dr. Allen C. Burton, University of Toronto biophysicist; and Dr. H. C. Bazett, professor of physiology at the University of Pennsylvania, in a recent issue of "Science" magazine.

The "met" represents energy value and varies in absolute amount with the size of the individual. For example, for a man of average size, the "met" is approximately equal to the heat generated by a 100-watt lamp. One "clo," on the other hand, is the value of the insulation of a person's everyday clothing. The ad-

ditional insulation which would be added by topcoats and other clothing can be expressed in "clo" units.

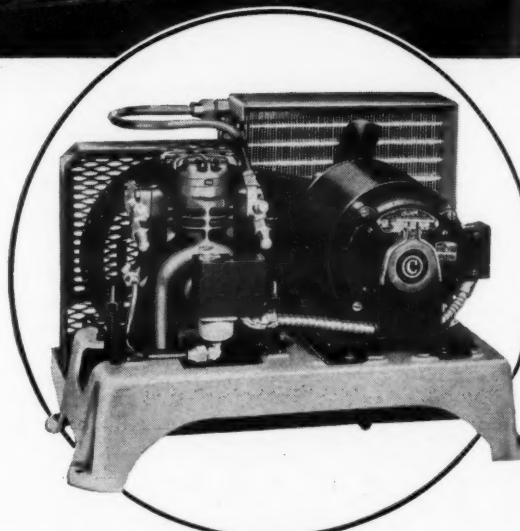
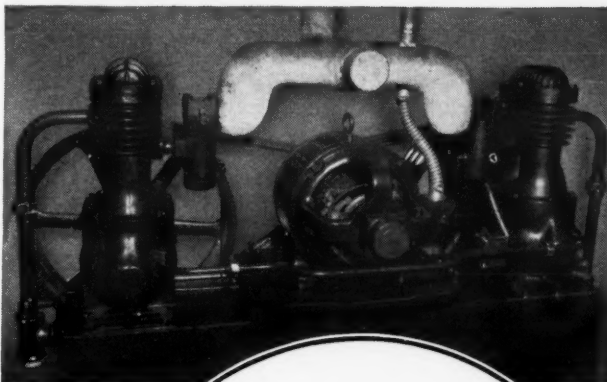
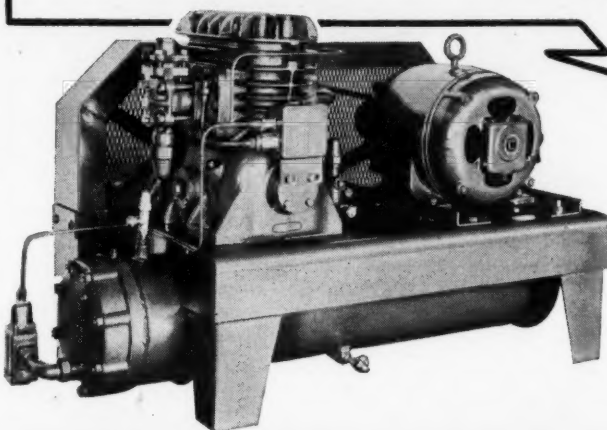
"Speaking in units associated with one's normal experience," say the scientists, "the engineers, the physicians, and the physiologists should be able to use their individual training more effectively in a common effort to solve current problems of heating and ventilation, as well as those of the physiological adjustments associated with the maintenance of heat balance."

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The "met," or energy unit, is defined as 50 calories of skin, or the heat generated by a man in a comfortable sitting position.

The "clo," or insulation unit, is the amount of clothing necessary to keep a man comfortable, who is in a resting or sitting condition in a normally ventilated room—temperature of 70° F. with humidity about 50%.

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Music Hall In Buffalo Air Conditioned For Audience's Comfort

BUFFALO—Comfort for concertgoers is the principal purpose of the cooling system which was placed in operation in the new Kleinhans Music Hall here this year.

Summer performances in the hall draw an average attendance of 2,900 persons. The cooling system provides each customer with about 44 cubic feet of cooled air per minute. Capacity of the hall is 1,478,000 cubic feet, and the air conditioning system provides five changes of air each hour.

Eighteen fans, six supply and 12 exhaust, are incorporated into the cooling system. Air is drawn into the system through grilles at the top of the main building. From two large ducts it passes through cooling and pre-heating coils, sprays, and washers, and terminates in a 90-inch fan which sends it out into the building proper through a network of ducts and grilles.

One 75-ton and one 100-ton refrigerating machine located in the basement produce the 35 to 40° F. water which is circulated through the banks of cooling coils.

Beginning at the rear of the balcony ceiling, the cooled air is driven into the auditorium and music room through grilles visible in the "wavy" or graded ceilings. Circular ventilators uniformly distribute the air.

There are five such sections in the auditorium with a total of 117 grilles. Small grilles located under the auditorium seats return the air to the basement.

Hill To Manage Appliances For Rudge & Guenzel

LINCOLN, Neb.—Ross Hill, formerly Nash-Kelvinator sales representative for the state of Kansas, has been employed by Rudge & Guenzel department store as manager of the home appliance department.

Air Conditioning Ducts And Equipment Cleaned By Chemical Process

CINCINNATI—Thorough cleaning and dustproofing of grease ducts, chutes, and air conditioning ductwork, fans, coils, filters, controls, louvers is claimed for the chemical process introduced by SPEED Chemical Systems with headquarters here.

The process is guaranteed to keep the ducts and equipment cleaned for one year, and is claimed to be odorless and harmless to people, property, and foodstuffs. The chemicals can be applied without interrupting business, it is said.

A single treatment, applied by factory trained service men, removes dirt and prevents further clogging and accumulation, it is said. Any foul odor in ducts caused by accumulation of musty and decayed matter is likewise eliminated by removal of the matter, it is claimed.

Grease ducts and chutes can be simply cleaned without the usual costly scraping method, and the chemicals are said to make the ducts and chutes fireproof for a year.

Franchises for this chemical service are granted to firms in several eastern and midwestern cities. First franchise granted was to the SPEED Chemical Service, 415 Brainard St., Detroit, recently established by L. S. Morse, Jr., formerly associated with the Detroit branch of Westervlin & Campbell Co. Mr. Morse's firm holds the franchise for the state of Michigan.

Baker Named Appliance Head For Grinnell

TOLEDO—Charles W. Baker has been named manager of Grinnell Bros. store's major appliance department here, which has been expanded considerably to cope with a 30% increase in all sales. The department is staging a fall exhibit of 1942 appliance lines, with Norge, Philco, G-E, and Kelvinator refrigerators being featured.

Ben Rand Establishes Offices In New York

NEW YORK CITY—B. R. Rand New York, Inc. has been established by Ben R. Rand at 40 Wall St. here as headquarters for his organizations in South America which represent Brunner Mfg. Co., Stewart-Warner Corp., Virginia Smelting Co., Henry Bower Chemical Co., Mueller Brass Co., and Linderme Tube Co.

The New York company, of which Mr. Rand is president, is wholly controlled by Mr. Rand, as are his Argentine, Brazilian, and Uruguayan firms. Purpose of the New York firm is to follow up orders, give better and faster service to clientele and principals, and to endeavor to take care of difficulties arising due to the international situation.

The new headquarters will be in full operation within a few months, at which time Mr. Rand plans to return to South America.

New Uses of 'Sterilamps' Outlined by Rentschler

DETROIT—Dr. Harvey C. Rentschler, director of research for the Westinghouse Lamp Division, discussed "Invisible Rays for Fighting Bacteria" at a meeting sponsored by the Michigan section of Illuminating Engineering Society and the Electric Club of Detroit here recently.

New ideas and methods of combating air-borne bacteria were outlined by Dr. Rentschler, one of whose demonstrations employed a 30,000 ampere "microbe gun," and another demonstrated the actual killing of bacteria by means of the Westinghouse "Sterilamp."

Josephine Cox Added To Johnson Electric

SPRUCE PINE, N. C.—Miss Josephine Cox has been added to the staff of Johnson Electric Co.

Sawyer Heads Promotion For G-E Home Bureau

BRIDGEPORT, Conn.—William E. Sawyer, formerly advertising manager for General Electric vacuum cleaners, has been named to take charge of advertising, promotion, and related activities of the General Electric Home Bureau.

In his new capacity Mr. Sawyer, who has been associated with advertising activities of G-E's appliance and merchandise department for several years, takes over duties formerly performed by F. A. Parnell and Paul E. Whitney.

Mr. Sawyer joined General Electric in 1934 after three years in consumer research for the American Psychological Corp. He served first with the G-E radio advertising section, where he started and edited the "Bandwagon" radio magazine. In 1935 he became assistant advertising manager of the home laundry section.

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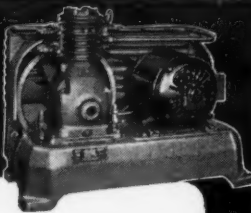
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5 HP. TO 20 HP.

How Heavy Duty, Single Phase Motors Are Designed To Solve the Starting Problem

Single Phase Motors (Cont.)

Editor's Note: This is the seventh instalment, and the third section, in a series of articles on electric motors written for the refrigeration and air conditioning service man. It is the aim of the author to give in simple terms a description of direct current, polyphase, and single phase motors, and then discuss installation maintenance, and servicing problems.

By R. A. Fuller,
Industrial Engineering Dept.,
General Electric Co.

Resistance Split Phase Motors

Single phase motors for heavy duty service are somewhat different from those discussed previously. Fig. 35 shows a single stationary winding with a squirrel cage rotor. It can readily be demonstrated that such a motor will run, and develop plenty of power, if it is started rotating

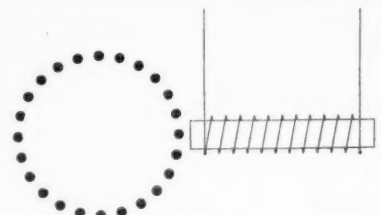


Fig. 35—The squirrel cage rotor at left will rotate, in either direction, when the stationary field at right is energized, provided the rotor is moved by hand to get it started.

by hand. It can also be demonstrated that it will do this in either direction of rotation.

From such a demonstration it becomes evident that the real problem on these motors is to start them. (This is an interesting experiment that can be easily performed by

disconnecting the starting winding of a resistance split phase, or capacitor, motor.)

Another winding, known as the starting winding, is added as shown in Fig. 36. A resistor is connected in series with this starting winding. This causes the starting winding to get strong first, then the main winding gets strong, giving a rotating

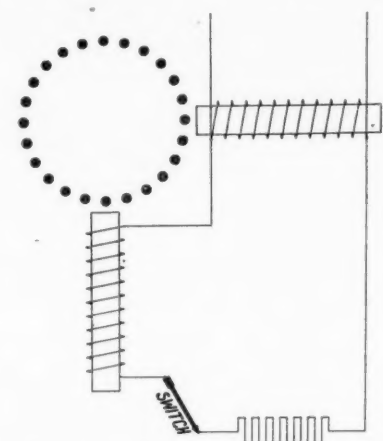


Fig. 36—By using two field windings, alternately energized to give a rotating field effect, the rotor can be made to start without "hand power."

field effect, for starting, similar to that obtained in Fig. 34. When the motor reaches approximately three-quarters of its rated speed, a switch opens to disconnect the starting winding from the line. The motor then runs as shown in Fig. 35.

This is known as a resistance split phase motor and is commonly used on washing machines. It is not practical to build such motors for the heaviest types of starting duty as they would tend to draw excessive starting current.

Fig. 36 shows a resistance connected in series with the starting winding. In actual practice the wire in the starting winding is selected so that the necessary resistance is included in the winding itself. The stator construction is essentially the same as that of a two phase motor. The centrifugal (operating on the outward force obtained when a weight is rotated) switch, that disconnects the starting winding from the circuit when the motor reaches three-quarters speed, operates as shown in Fig. 37.

When the motor is stopped the push collar presses against the moving contact and closes the contacts. There is insulation between the push collar and the moving contact as represented by the insulating button on the moving contact. When power

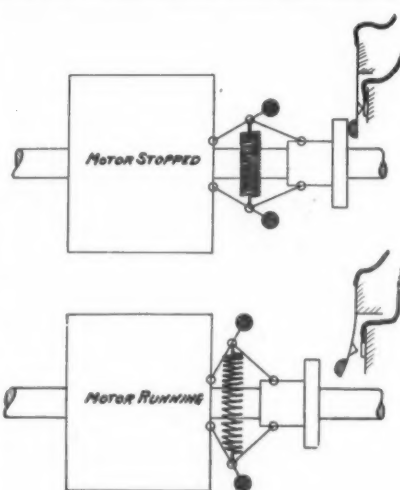


Fig. 37 shows how the starting winding is cut out of the circuit when the motor reaches three-quarters speed. Centrifugal weights pull out the collar at the proper speed, thus breaking the contact which energized the starting winding.

is applied to the motor windings the rotor, including the centrifugal mechanism and push collar, rotates at rapidly increasing speed. Until three-quarters speed is reached the centrifugal mechanism maintains the position shown in the sketch marked "Motor Stopped" (Fig. 37) and the push collar rubs on the insulating button on the contact.

When three-quarters speed is reached the centrifugal force on the flyweights causes them to move outward as shown in the sketch marked "Motor Running." The link-

age connections to the push collar pull it away from the switch and the switch opens. When the motor is coasting to a stop the spring, in the centrifugal mechanism, pulls the flyweights toward the shaft at slightly below three-quarters speed and thus closes the contacts again.

Capacitor Motors

Where the starting duty is severe, as in condensing units and air compressors, a capacitor is used in series with the starting winding as illustrated in Fig. 38. This gives a rotating field effect, during starting, similar to that described for Fig. 34. The starting winding is disconnected by the centrifugal switch at approximately three-quarters of the rated speed of the motor.

The capacitor motor is very similar in construction to the resistance split phase motor as described

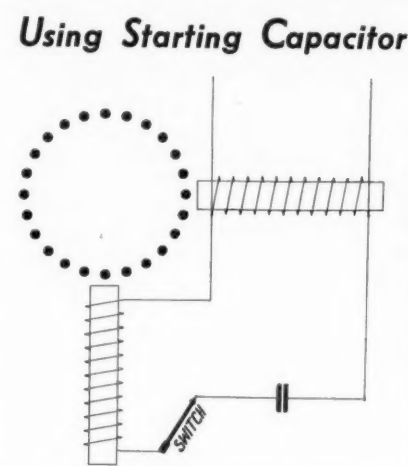


Fig. 38—When starting duty is severe, a capacitor is used in series with the starting winding to give a rotating field effect.

previously. The capacitors may be mounted inside the endshield, on top of the motor or in a case separate from the motor. As the capacitor is only in service during the starting of the motor the required capacity is obtained in a small space by using an electrolytic capacitor.

Such capacitors are suitable only for short time duty as is experienced in starting and in tripping of the overload in cases of excessive starting load. The labels on these capacitors usually indicate that they are for this type of service.

In order to improve operating characteristics, such as reducing the starting current or increasing the efficiency, it is sometimes desirable to include a running capacitor as shown in Fig. 39. This running capacitor has a low capacity, when compared with the starting capacitor, but the fact that it must be

Running Capacitor

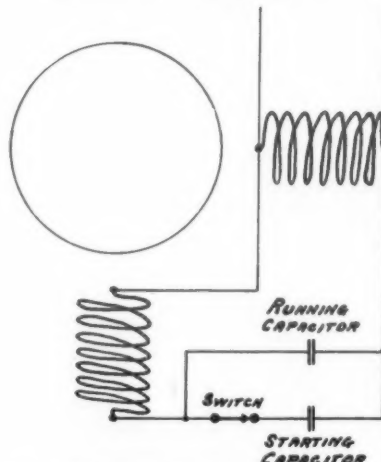


Fig. 39—Sometimes a running capacitor, as well as a starting capacitor, is included to improve operating characteristics of a motor.

suitable for continuous service tends to make it physically larger than the starting capacitor. In general, running capacitors are now used only on some motors above 1 hp. for heavy duty service.

Continuously rated capacitors were used for starting before the introduction of the electrolytic capacitor. These were capable of withstanding much higher voltages than were generally used for driving the motors. The benefit from the use of

the capacitor increases in proportion to the voltage applied to the capacitor. An auto-transformer was used, as shown in Fig. 40, with a double throw centrifugal switch.

At starting the capacitor operated on high voltage. When the motor reached three-quarters speed the centrifugal switch transferred the connection to another point on the auto-transformer. This reduced the voltage on the capacitor which re-

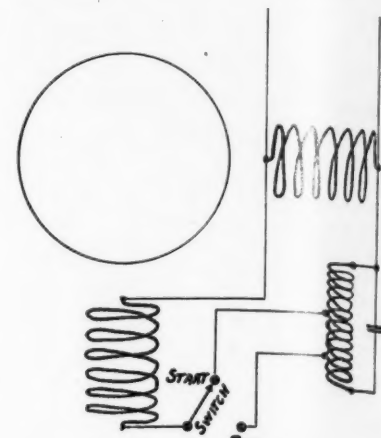


Fig. 40—Continuously rated capacitor, and an auto-transformer, were used for starting before the introduction of the electrolytic capacitor.

maintained in the circuit to function as a running capacitor. The auto-transformer and capacitor were usually mounted in a single case and were known as a capacitor transformer.

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What About Steel?

Manufacturers Assn. Says There Will Be Enough For Civilian Needs

NEW YORK CITY—Contention of the National Association of Manufacturers that there will be an adequate supply of steel next year for both defense and restricted civilian needs, and that the 10-million-ton increase in steel production to be reached early next year under terms of the so-called OPM steel expansion program "appears difficult to understand," is expressed in the 55-page survey just released by the association's statistical department.

Prepared for consideration by the forty-sixth annual Congress of American Industry to be held early in December, this study charges that government officials have overestimated steel requirements in several instances, notably for export and railroad uses.

The survey further asserts that expansion of steel capacity from 89 to 99 million tons as postulated by OPM is hard to comprehend, inasmuch as "available data of overall steel requirements do not indicate a need for expansion on a large scale."

FOR CIVILIANS—54 MILLION?

In endeavoring to determine how steel production will be divided between defense and civilian requirements in 1942, the survey accepts the estimate of Donald M. Nelson, executive director of the Supply Priorities & Allocations Board, that 35 million net tons of steel will be needed for defense next year. The report thus concludes that the balance of 54 million tons of steel will be adequate to fill the restricted civilian requirements for 1942.

"In view of the rapidly changing defense situation, the October estimate of 35 million tons for defense purposes in 1942 does not appear to be inordinately excessive," the N.A.M. report concedes. "It presumably includes export needs and also certain indirect defense requirements, such as steel for machine tools.

"On the other hand, it might be questioned, as in the previous Office of Production Management estimates, whether overseas transportation difficulties have been adequately considered, and also whether the shortages in various alloying elements have been recognized.

"Despite this tremendous allocation of steel for defense in 1942, there will remain a balance of 54 million tons of capacity to satisfy indirect defense and civilian needs out of total steel-making capacity of 89 million tons. This does not compare unfavorably with total domestic consumption of 52,300,000 tons of ingots in 1937 (out of total production of 56 million tons in that year)."

CALLS NELSON'S FIGURE HIGH

Most recent estimate of civilian steel requirements for the coming year is the 58,500,000 tons set by Mr. Nelson in October. In endeavoring to account for the difference between this figure and the 54 million tons which it is estimated will be available for civilian use in 1942, the N.A.M. study singles out railroad

steel requirements as an instance in which the OPM figures are too high.

"The apparent tightness in the supply of steel is due, in no small measure, to the size of indirect defense requirements," the survey states. "Unfortunately there are almost no data which permit determination, even approximately, of the extent or the definition of such indirect requirements.

WHAT IS 'DEFENSE'?

"The concept of indirect defense is so indefinite that practically all steel could be placed under priorities for direct and indirect defense needs. It is a question, however, whether too many steel priority ratings have not been granted, especially for the so-called indirect defense needs. By stretching a point here and there almost all steel requirements can be related to defense.

"The recent curtailment in the production of automobiles, refrigerators, and certain other articles has generally obscured the fact that there has been a tremendous upsurge in non-defense steel consumption in the last few years. Many industries took advantage of a larger volume of business to make long-needed replacements and extension of plant and equipment.

"Employment rose at a time when wage rates had attained record highs. The ensuing sharp increase in consumer income released a long pent-up demand for such durable consumer goods as automobiles, refrigerators, stoves, and other household appliances, most of which required large quantities of steel. Many consumers rushed to buy in anticipation of shortages.

DURABLE GOODS 'LULL' SEEN

"However, it is probable that even without curtailment by government agencies there would have been a lull in demand for consumers' durable goods after the period of peak buying had passed. Peak demands for such goods are restricted to relatively brief periods and cannot be counted on to provide a sustained market for steel products over any long-continued period."

The report charges that the priorities system, to be replaced soon by allocations, failed to solve the increasing difficulties for Army and Navy officials in obtaining certain types of steel and failed to provide an adequate check against hoarding and excessive accumulation of inventories.

Plate & Alloy Steel Probably First To Get Allocated

PITTSBURGH—Steel plates, reinforcing bars, tool steel, and alloy steels will probably be the first items hit by the allocations system which the Office of Production Management

is considering, believe steel executives here after talks with OPM officials. Further tightening of governmental control over steel is seen as the result of the increasing shortage of scrap and pig iron.

OPM officials have promised steel men that the question of allocating steel will be approached cautiously and that only those items in which there appeared to be a serious shortage at the present time would be affected by outright allocation.

The scrap shortage is said to be growing increasingly worse, and the steel industry fears the substantial shut-downs will occur with the coming of snow and colder weather. Some open-hearth furnaces have been closed periodically because of the shortage of scrap.

While thus far the curtailment of steel production because of the scrap shortage has been small compared with total production, defense and steel officials view any steel production loss as serious.

The scrap situation is so serious that "bootlegging" has increased, it is said. Some number one heavy melting steel has been billed as low-phosphorus grades, which command prices as high as \$4.75 a ton more than the number one scrap.

Shipments of steel on rated tonnage constitute 60 to 80% of total deliveries, it was brought out at OPM's meeting of steel men. Of the November unfilled steel tonnage about 60% was for defense purposes, directly and indirectly. Because of fresh day-to-day commitments, however, it is thought the defense orders will run higher.

Government officials have stated that non-essential steel requirements will get less attention as defense needs multiply.

Scarcity of Materials Analyzed In Study Of Defense Trend to Allocations Setup

Supply-to-Demand Ratios Listed By Institute

NEW YORK CITY—Although the government will gradually shift its control on industry through priorities to allocations during the coming months, the priorities machinery will not be abandoned, according to the Research Institute of America, which has just made public a study of the methods of control being used with an estimate of the probable degree of scarcity of critical materials for the balance of this year and 1942.

The Supply Priorities and Allocation Board has decided in favor of an all-out allocations program, according to the Research Institute. The board aims to obtain month-by-month requirements of critical materials needed for the production of military, civilian, industrial, and essential public service, as well as repair parts and capital expenditures.

Then the board will match these requirements with a detailed inventory of the availability of the scarce materials. Most scarce materials are already under tight control, and will be released on a pound per pound basis for approved requirements, states the institute's report.

In listing the present and probable future status of scarce critical materials, the Research Institute stresses that as the military production program is stepped up materials will likely become even more scarce.

Aluminum is the "scarcest" of all

critical materials in that civilian requirements are 52 times greater than the supply available for civilian use, according to the Research Institute. In 1942 the ratio will drop from 52 to one to six to one.

The ratio on brass at present is one to three, that is, 1 pound available for the civilian demands of 3 pounds. In 1942 the ratio will be one to four. Copper and cork ratios are both estimated at one to one and two-tenths. The copper ratio will remain the same next year.

Present ratio of lead supply to demand is one to one, with 1942 being estimated at one to one and a tenth. There is an apparent "surplus" of mercury, the ratio being one to seven-tenths, which may change in 1942 to one to nine-tenths.

Supply of neoprene now is equal to half the civilian demand (one to two), but next year the ratio will drop to one to five-tenths. No nickel is presently available for civilians, but Research Institute estimates the ratio will hit one to three in 1942.

Although stating that there is no supply of pig iron, rubber, tin, or zinc to meet civilian demands, Research Institute lists ratios of supply to demand on these materials as follows: pig iron, one to one and one-tenth; rubber, one to seven-tenths; tin, one to eight-tenths; and zinc, one to one and five-tenths.

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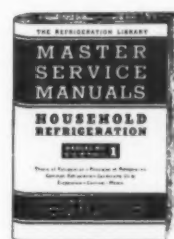
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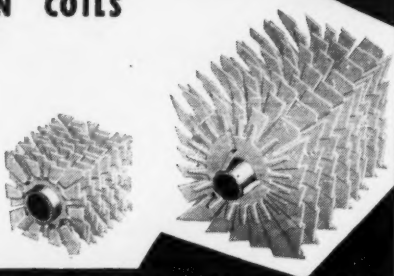
ANSUL CHEMICAL COMPANY • MARINETTE, WISCONSIN

AGENTS FOR KINETIC'S "FREON-12"

FOR MAXIMUM EFFICIENCY

Exclusive PROPELLER-FIN COILS

American's exclusive Propeller-Fin gravity-coils and Propeller-Fin Jr. forced air cooler coils nearly double B.T.U. transfer. The secret lies in the serrated fin, shaped like a propeller. Smaller coil areas, less weight, less metal will do the job. For maximum efficiency specify American Coils—the fastest growing line.



AMERICAN COILS INC., 25 Lexington St., Newark, N.J.

You can SPEED UP your flaring!



The new Imperial Flaring Tool with slip-on yoke, provides ease and speed of operation never before attained in a flaring tool. The yoke is made so that it can be slipped on over the bar without twisting or turning. The inside edges of the yoke are slotted so that once in position a slight turn holds it in place on the bar. Yokes are made of forged steel. An additional advantage of this tool is the construction of the bottom of the yoke, which permits flares to be made where there is little space between nut and the end of tubing. Flare tubing sometimes offers this problem. Flares soft copper, brass or aluminum tubing. No. 195-F Imperial Flaring Tool, flares 1/4", 3/8", 1/2", 5/8" and 3/4" O.D. tubing. Price each, \$4.25. Also available for all other sizes of tubing.

THE IMPERIAL BRASS MFG. CO., 565 S. Racine Ave., Chicago, Ill.

IMPERIAL

VALVES • FITTINGS • TOOLS
CHARGING LINES • FLOATS
STRAINERS • DEHYDRATORS

ORDER FROM
YOUR JOBBER



IT PAYS!

TYLER dealers are an alert, aggressive, money-making crowd. Complete refrigerator line, outstanding features, extra value. Built right, priced right. Write Tyler Fixture Corporation, Dept. A-1, Niles, Michigan.

Buy

Humi-Temp Forced Convection Units—Patented CROSS-FIN COILS—Bare Tube Coils—Zinc Fused Steel Plate Coils—Disseminator Pans—Heat Exchangers—Evaporative Condensers—Instantaneous Water Coolers—

See Your Jobber or Write Direct



REFRIGERATION PRODUCTS FROM YOUR LOCAL JOBBER! He Is Playing a Vital Part in Preserving the Nation's Food Supply!

LARKIN COILS, INC.
519 MEMORIAL DR., S. E., ATLANTA, GA.



REFRIGERATION SUPPLIES AND EQUIPMENT



WRITE FOR OUR BIG CATALOG ON YOUR LETTERHEAD

SAME CAREFUL, CHEERFUL ATTENTION BY MAIL OR "IN PERSON"

THE HARRY ALTER CO.
1728 S. MICHIGAN AVENUE, CHICAGO, ILLINOIS
3 CHICAGO BRANCHES, NORTH, WEST, SOUTH

NEW YORK
BROOKLYN
BRONX
JAMAICA

NEWARK
DETROIT
CLEVELAND
ST. LOUIS

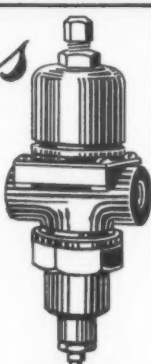
Water Valves

Amino No. 614 Water Valve is used to regulate the amount of water passing through water-cooled condensers. It has a double bellows seal, removable body seal, is free from chatter and will operate on all refrigerants except ammonia under water pressure from 15 lbs. to 200 lbs.

Standard connections 3/8" x 3/8" F.P.T. On special order we supply 1/2" x 1/2" F.P.T. at no extra cost.

AMERICAN INJECTOR COMPANY

1481 FOURTEENTH AVENUE, DETROIT, MICHIGAN
Pacific Coast: Van D. Clothier, 1015 E. 16th, Los Angeles
Export: Borg-Warner International Corporation, 310 S. Michigan Ave., Chicago, Ill.



The Service Man's Notebook

By Henry Kronke

The tabular material following gives an approximate high side pressure for air cooled and water cooled condensing units, under certain specified conditions. Mr. Kronke points out that these are only approximations, and that such factors as the size and condition of the condenser will affect the high side pressure.

A condenser has to give up from 1,250 to 1,300 B.t.u. for every 1,000 B.t.u. removed by the evaporator.

APPROXIMATE HIGH SIDE PRESSURE OF AIR COOLED UNITS

Room Temp. °F.	"Freon-12" Suction Temp. °F.				Methyl Chloride Suction Temp. °F.				Sulphur Dioxide Suction Temp. °F.			
	40°	20°	0°	-20°	40°	20°	0°	-20°	40°	20°	0°	-20°
60°	110	105	96	87	89	84	77	70	61	56	48	40
70°	123	114	102	93	103	94	84	74	74	63	55	47
80°	141	130	117	108	118	109	99	89	86	75	66	58
90°	158	147	135	125	135	127	116	105	100	89	79	70
100°	177	165	155	145	156	146	136	126	116	103	93	84
110°	197	185	175	165	178	167	157	147	134	121	111	101

CONDENSER SURFACE REQUIRED FOR AIR COOLED UNITS

Hp.	Sq. Ft.
1/8	9.0
1/4	12.0
1/2	18.0
3/4	30.0
1	50.0
1 1/2	65.0
2	90.0
3	120.0
4	180.0

APPROXIMATE HIGH SIDE PRESSURE FOR WATER COOLED CONDENSING UNITS

Water Inlet Temp. °F.	"F-12"	CH ₃ Cl	SO ₂
50°	88	69	44
60°	101	82	53
70°	115	95	63
80°	130	110	74
90°	146	125	87
100°	163	142	104

New York & Mass. RSES May Meet Together

BUFFALO—The 1942 convention of the New York State Refrigeration Service Engineers Society will be held here sometime in October, according to an announcement by John K. Bush, past president of the association.

Mr. Bush explained, however, that there is a possibility that the New York and Massachusetts associations may combine in one convention next year, and in that event the Buffalo meeting may be changed. He also revealed that plans are under consideration for an Eastern States convention eventually.

The following officers were elected by the New York State association at the recent New York City convention: president, George Gardner, Schenectady; first vice president, Eugene Phillips, Rockaway Beach; second vice president, Weldon Andrews, Syracuse; secretary, E. E. Condon, Flushing; treasurer, R. D. Davis, Buffalo; and sergeant-at-arms, Ralph Feathers, Troy.

4 More Field Offices Opened By OPM

WASHINGTON, D. C.—Four additional field offices to help qualified manufacturers obtain defense work have been opened by the Office of Production Management, bringing the total number of such offices to 67. New offices are located in:

Jackson, Miss.—610 Tower Bldg.; Knoxville, Tenn.—202-204 Goode Bldg.; Phoenix, Ariz.—406 Security Bldg.; Wilmington, Del.—Pennsylvania R. R. Bldg.

Small Business Men Form 'Clearing House' To Locate Materials

CHICAGO—To help manufacturers locate tools and materials they now lack because of the defense program a "materials clearing house committee" has been formed by the National Small Business Men's Association, Inc.

The committee will investigate hidden surpluses of various materials, tools, and equipment which have accumulated in warehouses and plants throughout the country. A list of such materials, etc. will be developed by the committee for small manufacturers who need materials to keep operating.

Manufacturers who require certain materials or tools will then be able to obtain from the association, located at 407 S. Dearborn St. here, the name, address, and telephone number of the owner or the person with whom the manufacturer may negotiate directly and independently. The committee will require a fee equal to 10% of the f.o.b. selling price to make its efforts self-sustaining. This fee will be sent in by the seller at the time of payment.

No buying or selling will be done by the committee on its own account, nor will the group be affiliated with brokers, material men, manufacturers, or others, it is said. It does not intend to act as an intermediary between buyer and seller, except for first bringing them together. Men with broad experience will staff the committee.

Heading the association of small business men which is sponsoring the committee are: president, Frederick A. Virkus of the Virkus Co.; vice president, E. A. Zimmerman of Zimmerman & Norman; secretary, William B. Basile of Johnson & Wiles; and treasurer, Donald E. Currier of Ashman, Reedy & Currier.

Steinkraus Named Gen. Mgr. For Bridgeport Brass

BRIDGEPORT, Conn.—Herman W. Steinkraus, vice president and a director of Bridgeport Brass Co. here, has been named general manager of the company. He continues as vice president and a director.

Formerly sales manager of the Osborn Mfg. Co., Cleveland, Mr. Steinkraus became general sales manager, as well as vice president and a director of Bridgeport Brass in 1928 after he sold his own metals firm to the Bridgeport company.

Contractors In Detroit Hear City Inspector

DETROIT—H. H. Mills, chief inspector of the Department of Buildings and Safety Engineering, City of Detroit addressed members of the Refrigeration Contractors Association of Detroit at their meeting on Wednesday, Nov. 28.

Anaconda Copper Refrigeration Tubes

"Assembling instructions" details page 11 of new book

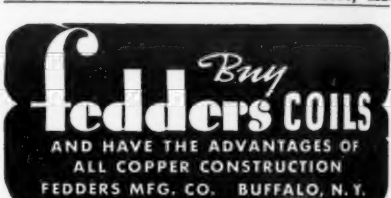


THE AMERICAN BRASS CO.
FRENCH SMALL TUBE BRANCH
General Offices, Waterbury, Conn.

MANUFACTURER'S AGENT WANTED



THE REOL COMPANY
2308-10 Frederick Ave., Baltimore, Md.



AND HAVE THE ADVANTAGES OF ALL COPPER CONSTRUCTION
FEDDERS MFG. CO., BUFFALO, N.Y.



PERMANENT AIR-FILTER PANELS
AIR-MAZE CORP., CLEVELAND, OHIO



Single and twin cylinder units. Engineered and manufactured to highest standards. Write GALE PRODUCTS
1635 Menmouth, Galesburg, Ill.



SPECIFY
Virginia
REFRIGERANTS

VIRGINIA SHELTING CO.
Located at Tidewater
WEST NORFOLK, VA.

KERO TEST
Valves and Fittings
The Standard of the Industry

Kerotest Manufacturing Co.
Pittsburgh, Pa.

MUELLER BRASS CO.
Port Huron, Mich.
TRIPLE SEAL DIAPHRAGM VALVE
Longer Diaphragm Life
Positive Sealing at Three Essential Points

END TROUBLE CALLS!
Investigate the exclusive advantages of White-Rodgers Hydraulic Action Controls. Your copy of new catalog will be sent by return mail. Write today!
White-Rodgers Electric Co.
1211 Cass Ave., St. Louis

Over 250,000
MASTERBUILT Lockers In Use
Investigate the Saf-T-Loc Individual Locker the popular locker sold only thru refrigeration and insulation distributors. Write for particulars.
Master Refrigerated Locker Systems, Inc.
121 Main St. Sioux City, Iowa

For Information on Motors
FOR ALL TYPES OF
Air Conditioning and Refrigeration Equipment
WRITE TO
Wagner Electric Corporation
141 PLYMOUTH AVE. ST. LOUIS, MO.

HEAT TRANSFER EQUIPMENT
MARLO COIL COMPANY
SAINT LOUIS, MISSOURI

Specify DRYERS
CHARGED WITH SILICA GEL
THAT BEAR THIS LABEL
Ask your Jobber

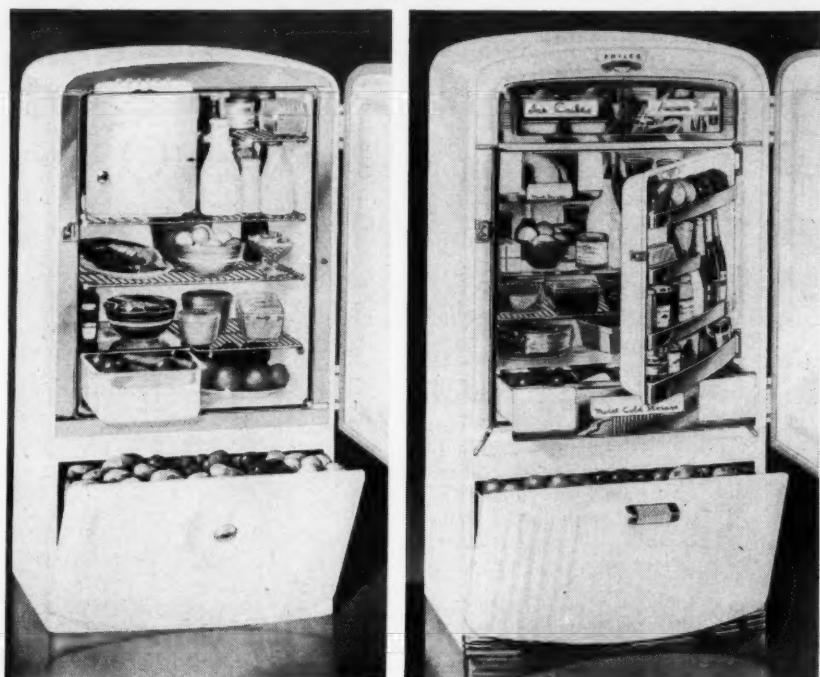
BUNDY TUBING
ENGINEERED TO YOUR EXPECTATIONS
BUNDY TUBING CO., DETROIT

COOLMASTER
"The Product Cooler of Tomorrow"
KRAMER-TRENTON CO.
TRENTON, N. J.

Bush FINNED TUBE PRODUCTS
HARTFORD, CONN.

Specify ALCO
for Maximum Efficiency, Trouble-Free Performance
ALCO VALVE CO. ST. LOUIS, MO.

Philco 'Leader' & Top Model For 1942



Here are both ends of Philco's five-model refrigerator line for 1942, which is being introduced this week. At left is the leader, model SMR-6, the only 6-foot box Philco is making this year. At right is the top model and single Conservador unit, the RAH-7, a 7-foot model.

New Styling Features Philco's 1942 Line

(Concluded from Page 1, Column 3)

An adjustable sliding shelf permits varying of the space between shelves. Storage capacity of R-7 is 7.1 cu. ft., shelf area 13.3 sq. ft.

High humidity "moist cold" compartment; large, enclosed compartment for frozen food storage; and a refrigerated cold shelf are chief features of model RH-7. Bottom shelf, just above the full-width vegetable crisper drawer, is refrigerated.

RH-7 also has a "fold-away" shelf which provides adjustable space for storage of tall bottles or bulky foods. This model is rated at 7.1 cu. ft. storage capacity with a shelf area of 14 sq. ft.

Top model of the 1942 Philco line is RAH-7, the only one equipped with the Conservador, a shelf-lined inner door. Top section of the refrigerator is devoted to compartments for frozen food and ice cube storage. These two chambers are enclosed in crystal glass doors. Storage capacity of this model is 7 cu. ft., with a shelf area of 13.9 sq. ft.

To introduce the new line and to shape and discuss sales plans eight sectional meetings are being held.

First meeting was scheduled for Philadelphia on Dec. 2. Meetings in Boston, Chicago, and Cincinnati were planned for Dec. 3; Buffalo and Kansas City, Dec. 4; Atlanta and San Francisco, Dec. 8; and Charlotte, N. C. on Dec. 9.

D. P. Heath Killed By Hit-Run Driver

(Concluded from Page 1, Column 2) who had a hand in many engineering developments in refrigeration, Lieut. Commander Heath had at various times been in the employ of Kelvinator, Servel, Crosley, McCord Radiator & Mfg. Co., and Tecumseh Products Co. He had been quite active in the affairs of the American Society of Refrigerating Engineers. A graduate of the U. S. Naval Academy, he retired in 1920 but was called back to active service last year, stationed at the Philadelphia Navy Yard aircraft plant.

Quick work by the Philadelphia police resulted in the apprehension of Vincent Vernacchio, who confessed to being the hit-run driver after being grilled by the police. When police found Vernacchio's abandoned car with smashed headlight, he claimed it had been stolen. However, when confronted by bloodstains found on his driver's license, which resulted from his moving the unconscious body of Lieut. Commander Heath from the center of the road to the curbing, he confessed.

The hit-run car, speeding north on 11th St. south of Beaver, and almost directly opposite the north end of the Municipal Stadium, struck Lieut. Commander Heath with such force that the headlight of the sedan was telescoped back into the fender.

Surviving are his wife Florentine, and a son, William.

Col. Coneybear Discusses Interpretations of Repairs Order P-22

(Concluded from Page 1, Column 5)

The present P-22 as amended provides that existing equipment in those places covered by the law can be kept running, and where "chemicals" or like materials have a normal loss through usage, Col. Coneybear believes the order can be interpreted as permitting the purchase of "make-up" amounts of the needed materials.

This interpretation would seem to apply to refrigerants.

The endorsement paragraph ("this order carries an A-10 rating under Preference Rating P-22, etc.") which is written on the purchase order for materials and is the only thing needed to be done to satisfy the requirements of the P-22 order, must be "manually signed" by an officer of the company ordering the materials on the original draft of the order, but may be stamped on subsequent copies which may be made.

Report of the general meeting at which officials of several divisions of the OPM spoke will be published probably in the next issue of AIR CONDITIONING & REFRIGERATION NEWS. Here are some of the high spots, however:

Business men can expect more priority control in the coming year, not less.

Most metal shortages appear to be getting worse, although the steel picture isn't too bad.

We are now devoting 15% of our production effort to defense. Next year we must devote 50% to defense.

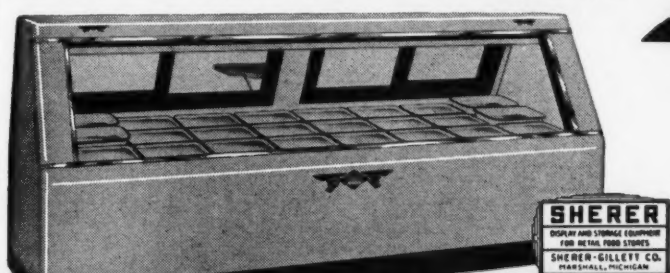
N. Y. Prices Announced For Two Lines

(Concluded from Page 1, Column 4)

corresponding 1941 figures. Model 602 was listed in this zone at \$149.95, including five-year warranty; and Model 612 at \$174.95. Two 6-foot Dual-Temp models were quoted at \$239.95 for the standard and \$269.95 for the deluxe unit. The three 8-foot models in the line were priced at \$199.95, \$279.95, and \$309.95.

YES SIR! THIS Sherer LINE IS A PROFIT MAKER
I'm satisfied with it in every respect!

"I changed over to the Sherer line a year ago and have never regretted it for one minute," says one Sherer producer. You, too, can make sure of your share of 1941's extra business by selling Sherer's complete line of display and storage refrigerators, backed by closely-knit factory cooperation.



Write today for complete franchise details concerning the Sherer line.

Sherer-Gillett Co. MARSHALL, MICH.

Henry
ABS-DRY—PRESSURE SEALED DRYER

Most efficient due to the exclusive Henry vacuum drying and pressure sealing process. Escape of dehydrated air when seal cap is removed proves unit is absolutely dry! Soldered brass shell with dispersion tube and dehydrant compression spring. Choice of Silica Gel or Activated Alumina.

Write for Catalog
ASK YOUR JOBBER ABOUT IT
Henry Valve Company
1001 N. N. SPALDING AVE. CHICAGO

DAIRY CASE **WALK IN** **REACH IN** **VEG-I-CASE** **STREAMLINER**

Increase your Income the PERCIVAL way
Sell the "Dealer's Choice"—the line that's COMPLETE in model, size, purpose and price—the PERCIVAL LINE. Write for attractive money-making proposition.
"1886—55 years of Satisfactory Service—1941"
C. L. PERCIVAL COMPANY, BOONE, IOWA

A SINGLE CONTROL Universal in Application
THE NEW POLARTRON
FOR PRESSURE CONTROL UP TO 100 P.S.I.
Separate "On and Off" Switches • Universal Range • Capillary Pressure Connections • Power Models by Stock • Minimum Free Service • "Control" on Call Set or Call to • No Start Cycling • Polartron Equipped Compressors can be Converted to Produce First Free Constant Cold
Note these Advantages
MINNEAPOLIS-HONEYWELL
MINNEAPOLIS-HONEYWELL REGULATOR COMPANY REFRIGERATION CONTROL
7601 FOURTH AVENUE SOUTH, MINNEAPOLIS, MINNESOTA

'ARMOR-CLAD' WALK-IN COOLER

- ★ALL STEEL EXTERIOR
- ★LOW IN COST (Due to volume production)
- ★REAL FLEXIBILITY (Easily enlarged by adding sections)
- ★EASY TO ERECT (2 unskilled workmen sufficient)
- ★SMALL STANDARD-SIZE SECTIONS (Portable and easy to handle)
- ★UNLIMITED RANGE OF SIZES
- ★PROMPT SHIPMENT

FOGEL REFRIGERATOR COMPANY Since 1899
Philadelphia, Penna.



A CASE OF PERFECT

PERFORMANCE

Performance that is perfect every minute of the day... that's what you get with every Koch display case. Miraflex cooling units mean perfect refrigeration. K-Beam lighting gives added sales impetus to profit-making displays. Welded steel construction and 4-in. insulation... permanent satisfaction built right into the case. Investigate the Koch case... and the complete Koch line. Write today for complete details, open territories, and Koch selling plan.



KOCH REFRIGERATORS
NORTH KANSAS CITY, MO.
You'll make money selling

Heavy Rain Delays Refrigeration Parts Drastic Power Cut By OPM For South

(Concluded from Page 1, Column 1)
 laxation of the blackout will be announced later.

Relief from the power curtailment program was made possible by several favorable developments. Most effective was a heavy rain over the region last weekend which yielded approximately 119,000,000 kilowatt hours of power.

The power pooling arrangement is now bringing into the shortage area more than 40,000,000 kilowatt hours a week. This is nearly 13,000,000 more than the highest amount brought in prior to the pooling provisions made mandatory under the OPM Order.

CLASSIFIED ADVERTISING

RATES for "Positions Wanted," 5¢ per word; minimum charge, \$2.50. Three consecutive insertions, 12½¢ per word; minimum charge \$6.25.

RATES for all other classifications, 10¢ per word, minimum charge, \$5.00 per insertion. Three consecutive insertions, 25¢ per word, minimum charge, \$12.50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count.

PAYMENT in advance is required for advertising in this column.

REPLIES to advertisements with Box No. should be addressed to Air Conditioning & Refrigeration News, 5229 Cass Ave., Detroit, Mich.

POSITIONS AVAILABLE

PARTNER WANTED, man with good sales record, experienced, invest \$10,000 to \$20,000. Take charge of sales organization, old established firm, manufacturing commercial refrigerators for all purposes, meats, delicatessen, beer coolers, florists, etc., also double duty cases. Large eastern city. Firm well rated, great opportunity for right man. State age, experience, etc. Box 1372, Air Conditioning & Refrigeration News.

WANTED a young engineer competent in the design of smaller types of refrigeration units. Should be self-dependent and anxious to grow with a small but vigorous organization. Please state nationality, age, religion, education, experience, etc. Address reply to Box 1374, Air Conditioning & Refrigeration News.

FRANCHISES WANTED

THIS ADVERTISEMENT is directed to manufacturers of commercial refrigeration and air conditioning equipment having faith and confidence in the future of our country. This advertiser fully appreciates that many refrigeration manufacturers are booked to capacity and are not eager to commit themselves to substantial additional business. Nevertheless, to manufacturers who ARE thinking of the future, we say, "Think of the future NOW!" To these manufacturers who are interested in SALES, we offer the facilities and services of a wide awake, hard hitting, financially responsible sales organization, equipped with a splendid engineering, installation and service department. Showrooms located in central Manhattan, excellent warehouse accommodations, and above all, an organization headed by an individual who has been successfully associated with the refrigeration industry for the past twenty years. Prompt replies will be appreciated. Box 1369, Air Conditioning & Refrigeration News.

BUSINESS OPPORTUNITIES

ESTABLISHED SALES and service business in prosperous central New York town of 14,000 with 100,000 trading area. Owner, moving due to other business obligations, offers excellent franchises; 400 active customers, chain store service contracts. A money-maker all year around, averaging \$25,000 gross. Moderate investment will cover inventory, location, entire going operation. Box 1371, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

QUANTITY LATE model Westinghouse electric ranges: 20" & 38" Widths, 3 & 4 Chromalox Burners \$35.00 & \$40. 50 Crosley air-conditioners (self-contained) \$45.00. 40 frosted food cabinets (formerly \$250.00) \$45. Quantity Crosley Icy Ball units original cartons (refrigeration without moving parts) \$27.50. Prices & catalogs upon request—INTERSTATE—600 Broadway, New York, N. Y.

SURPLUS STOCK brand new Westinghouse. Low-sides, complete with coils, valves, fans, manual controls, etc. 1 to 2 ton capacity. AC models \$37.50 each. DC models (easily converted to AC) \$24.50 each. Complete stock "as is" or rebuilt refrigerators, also Grunows. Write for prices. ASSOCIATED REFRIGERATOR PLANT, 3028 W. Hunting Park Ave., Philadelphia, Pa.

PATENTS

HAVE YOUR patent work done by a specialist. I have had more than 25 years' experience in refrigeration engineering. Prompt searches and reports. Reasonable fees. H. R. VAN DEVENTER (ASRE), Patent Attorney, 342 Madison Avenue, New York City.

Refrigeration Parts Jobber Listing

(Concluded from Page 3, Column 5)

NEW YORK (Continued)

Hempstead, Long Island
 Sid Harvey, Inc.

New York City
 Aetna Supply Co.
 Fidelco Industries, Inc.
 Albert Hofeld, Inc.
 Paramount Electrical Supply Co., Inc.

Poughkeepsie
 Poughkeepsie Plumbing Supply Co., Inc.
Rochester
 Ontario Metal Supply, Inc.
 Pfau's Refrigerator Parts, Inc.

Troy
 Aird-Don Co.
White Plains
 County Seat Plumbing Supply, Inc.

NORTH CAROLINA

Charlotte
 Henry V. Dick & Co.
Greensboro
 Hasco, Inc.

OHIO

Cincinnati
 The Merkel Brothers Co.
 Radio Supply Co.

Cleveland
 K. L. Debes & Co.
 Refrigeration Supplies Distributor

Columbus
 Refrigeration Electric Supply Co.

Dayton
 Allied Parts Co.
 The W. H. Kiefaber Co.
Toledo
 Baumgardner Distributing Co.
 The Heat & Power Engineering Co.

OKLAHOMA

Oklahoma City
 Macklanburg Brass & Copper Products, Inc.

Tulsa
 K. & M. Supply Co.
 Machine Tool & Supply Co.

OREGON

Portland
 Jacobs & Gile, Inc.

PENNSYLVANIA

Allentown
 Larson Supply Co.
Harrisburg
 Refrigeration Supply Co.
Philadelphia
 Electric Warehouse
 McArdle & Cooney, Inc.
 M. & E. Refrigeration Accessories Co.
 Victor Sales & Supply Co.
Pittsburgh
 William M. Orr Co.
 Williams & Co., Inc.
 Joseph Woodwell Co.
Scranton
 Central Service Supply Co.
Wilkes-Barre
 Radio Service Co.

RHODE ISLAND

Providence
 Rhode Island Refrigeration Supply Co.
 R. I. Supply & Engineering Co.

SOUTH CAROLINA

Charleston
 Allen & Webb

TENNESSEE

Chattanooga
 Pegler Machinery Co.
Knoxville
 Leinart Engineering Co.
Nashville
 J. B. Thomas Co.
Memphis
 United Refrigerator Supply Co.

TEXAS

Arlene
 Abilene Refrigerator Parts
Amarillo
 Clow & Cowan, Inc.
Dallas
 Beckett Electric Co.
 The Electromotive Corp.
 Refrigeration Supply Co.
El Paso
 Hays Electric Service
Fort Worth
 L-S Supply Co.
 McKinley Refrigeration Supply Co., Inc.
Houston
 D. C. Lingo Co.
 Standard Brass & Mfg. Co.
 Walter Refrigeration Supply Co.
San Antonio
 United Refrigeration Co.
 Westbrook Carburetor-Electrical Co.
Wichita Falls
 United Electric Service Co.

UTAH

Salt Lake City
 Flint Distributing Co.

VIRGINIA

Norfolk
 Noland Co., Inc.
Richmond
 Refrigeration Supply Co.
 A. R. Tiller, Inc.

WASHINGTON

Seattle
 Refrigerative Supply, Inc.

WEST VIRGINIA

Charleston
 Air Conditioning & Refrigeration Supplies, Inc.
Huntington
 King & Irwin

WISCONSIN

La Crosse
 W. A. Roosevelt Co.
Madison
 Gustave A. Larson Co.
Milwaukee
 Refrigeration Specialty Co.
Sheboygan
 J. J. Koepsell Co.

Design Is Altered By Gibson To Cut Use of Materials

(Concluded from Page 1, Column 1)
 pushed in an attempt to preserve dollar volume.

F. E. Basler, vice president in charge of sales, voiced the opinion that the temporary cessation of buying would be short lived now that OPA is releasing prices to the various manufacturers.

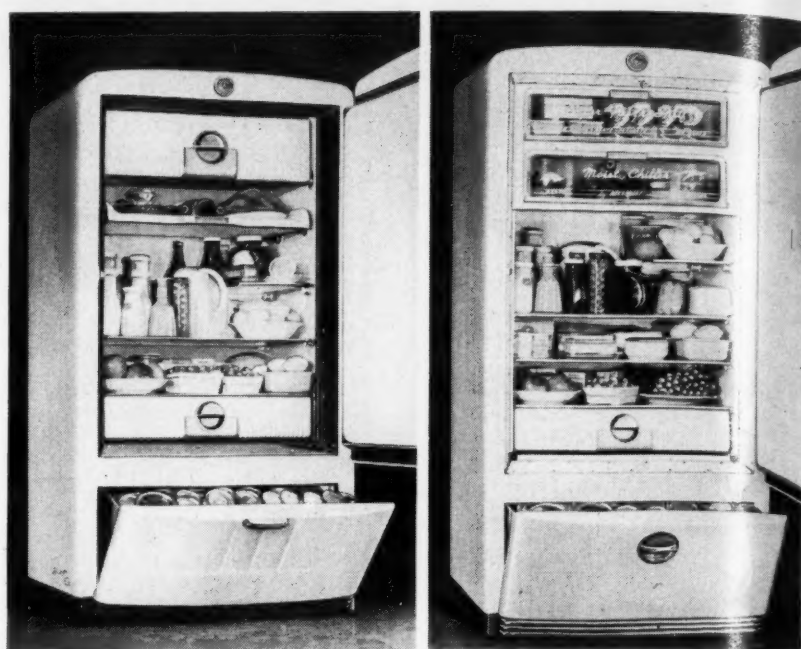
It was announced that two of the five refrigerator models had been in the warehouse for the past several weeks, the company having decided to postpone shipments and presentation of the new line until price approval had been secured from OPA. This approval has just been secured.

Certain product changes resulting from priorities on materials were announced by W. D. Krauter, service manager. He pointed out that Fiberglas insulation now is being used to replace the former insulation which was hard to get. No priorities have been placed on silica, from which Fiberglas is made.

Gibson refrigeration engineers also have developed a means of using less "Freon" refrigerant (which is under priority restrictions) without losing efficiency by compensating for the smaller charge of refrigerant by greater cooling area in the freezing unit, Mr. Krauter announced.

The company's consumer advertis-

Here's What Gibson Dealers Wanted



Gibson model F-682 (left) is a 6-foot unit equipped with "freezer shelf," vegetable freshener, and "tilt-bin." The 7-foot model SF-792, at right, features "super freezer shelf" and "moist chiller" compartments with crystal glass doors.

ing program for 1942 consists of a continuation of factory financed newspaper advertising, standard cooperative advertising, and an eight-month schedule in Life magazine.

Program of the convention also included a welcome by President Charles J. Gibson; and addresses by members of the sales and promotion staffs.

Goldberg Party Dec. 11

CHICAGO—Dancing, contests, and a floor show will mark the fifth annual Christmas party to be held by Herman Goldberg, manufacturers representative here. The party will be held in the North ballroom of the Stevens hotel, Thursday, Dec. 11, at 8:45 p.m.

National Defense NEEDS Public Health ..



An Apple Can't
 "Keep the Doctor Away"
 without
REFRIGERATION!

Fruit . . . Meat . . . Vegetables . . . all the richest source of health-giving vitamins, foundation foods for the buoyant health that makes America strong, give Americans the energy for today's emergencies . . . have a common enemy! It's decay, bacterial deterioration that might quickly sap their health-protecting, health-building benefits.

A relentless, uncompromising Enemy, true, but definitely

"licked" today by the marvels of modern REFRIGERATION!

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